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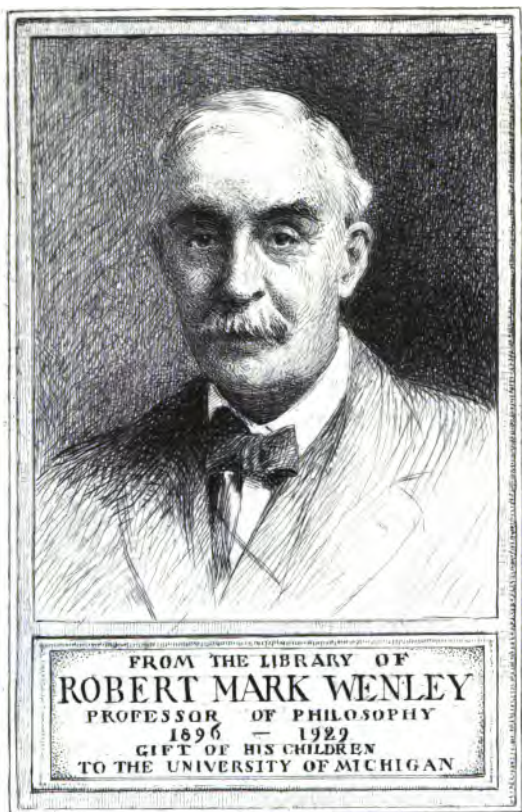
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STATE OF NEW YORK (State) State
hospital commission

State Commission in Lunacy

TWENTY-SECOND ANNUAL REPORT

October 1, 1909, to September 30, 1910

ALBERT WARREN FERRIS, M. D. }
SHELDON T. VIELE } *Commissioners*
WM. CARY SANGER }

TRANSMITTED TO THE LEGISLATURE JANUARY 31, 1911

ALBANY
J. B. LYON COMPANY, STATE PRINTERS

1911

STATE OF NEW YORK

No. 27

IN ASSEMBLY

JANUARY 31, 1911

STATE COMMISSION IN LUNACY

TWENTY-SECOND ANNUAL REPORT



STATE OF NEW YORK

STATE COMMISSION IN LUNACY

ALBANY, *January 31, 1911*

To the Speaker of the Assembly:

By direction of the Commission I have the honor to transmit herewith the annual report of the State Commission in Lunacy for the year beginning October 1, 1909, and ending September 30, 1910.

T. E. McGARR,

Secretary.

CONTENTS.

	PAGE
Letter of transmittal.....	1
General operations	3
Movement of population.....	3
Financial operations	4
Detailed report of the treasurer State hospitals.....	4
Receipts	4
Disbursements	5
Unexpended balances	5
Maintenance appropriations	5
Trust funds	6
Special fund expenditures.....	6
Expenditures for administration.....	7
Estimates for the year 1911-1912.....	7
Additional accommodations and extraordinary improvements....	8
Utica	9
Willard	10
Hudson River	10
Middletown	11
Buffalo	12
Binghamton	12
St. Lawrence	13
Rochester	14
Gowanda	15
Kings Park	15
Long Island	16
Manhattan	17
Central Islip	18
Mohansic	19
Comparative expenditures, 1907-1910.....	20
Per capita cost of maintenance.....	24
Average purchase price and per capita cost of staple articles of consumption	28
Fuel and light costs.....	31
Statistics of medical service	31
Statistics of employees.....	32
New buildings progressed.....	33
Capacity and census October 1, 1910.....	34
Lease of Ward's Island.....	35
Reception hospital, New York city.....	36
Mohansic State Hospital.....	37
Title to land and buildings at Flatbush.....	39
Statistical data	42

	PAGE
Civil service appointments.....	42
Appointments of first assistant physicians.....	43
Civil service eligible lists.....	44
Director of the Psychiatric Institute.....	45
Investigation of private institutions.....	46
Reducing size of reports.....	47
Legal work of the department.....	47
Fire protection at the Utica State Hospital.....	48
Automobiles.....	48
Co-operation of State Charities Aid Association.....	49
Legislation during the session of 1910.....	49
Expression of medical opinion regarding an alleged insane person.....	56
Increase in rate charged for reimbursing patients.....	70
Joint contracts.....	71
The contract for milk for metropolitan hospitals.....	71
Modern business methods desirable.....	73
Co-operation with the Department of Agriculture.....	73
Efficiency reports concerning medical officers.....	74
Vacation camps and cottages.....	75
New salary schedule for medical officers.....	76
<i>State Hospitals Bulletin</i>	77
Change in personnel of Commission.....	78
Quarterly conferences of superintendents with the Commission.....	78
Medical literary activity during the year.....	80
Water supply at certain hospitals.....	81
Medical services in hospitals.....	82
Psychopathic wards in general medical hospitals.....	83
Suggestion regarding possible future policy.....	84
Determination of the value of coal.....	92
Voluntary admission.....	93
Death of Dr. Oliver M. Dewing.....	94
The prevention of insanity.....	95
Private licensed houses.....	98
Bravery of nurses and attendants.....	101
Suicides and accidents at State hospitals.....	105
Insanity and the liquor tax.....	108
Work of deportation officers.....	108
Aliens.....	109
Nonresidents.....	110
Report of the Board of Alienists.....	111
Report of Ellis Island inspector.....	122
Tables concerning mental defectives at Ellis Island.....	124
Report of Medical Inspector Russell.....	126
The State hospitals.....	127
Discharge of patients.....	128
Reduction of the number of admissions.....	131
Overcrowding.....	134
The medical service.....	137
The nursing service.....	138

Report of Medical Inspector Russell — (<i>Continued</i>) :	
The State hospitals — (<i>Continued</i>) :	PAGE
Other departments	139
Complaints of patients	140
Improvements	141
Civil service methods and the State hospitals	144
Licensed private institutions	145
Conclusions	147
Report of Medical Inspector Doran	150
Report of the Psychiatric Institute	152
Report of the director	152
Medical work in the State hospitals	152
Research work of Psychiatric Institute	158
Report of the clinical work	160
Female service	160
Male service	173
Report of histological laboratory	190
Summaries of reports of State hospitals	261
Utica	261
Willard	262
Hudson River	264
Middletown	265
Buffalo	267
Binghamton	268
St. Lawrence	269
Rochester	270
Gowanda	271
Kings Park	273
Long Island	275
Manhattan	276
Central Islip	279
Mohansic	281
Report of State Charities Aid Association	282
Annual report of Board of Managers	282
Recent legislation	282
Commitment of the alleged insane for examination	283
Health officers	283
Examination of food supplies and agricultural methods	285
Qualification of Board of Alienists	285
The licensing of private institutions	286
New accommodations needed	286
Reports of visitors to State hospitals	290
General statistical tables of the insane	305-318

TWENTY-SECOND ANNUAL REPORT

ALBANY, *January 31, 1911*

To the Legislature:

In compliance with section 11 of chapter 27 of the Consolidated Laws, which requires that "the commission shall, annually report to the legislature its acts and proceedings for the year ending September thirtieth last preceding, with such facts in regard to the management of the institutions for the insane as it may deem necessary for the information of the legislature, including estimates of the amounts required for the use of the state hospitals and the reasons therefor," the State Commission in Lunacy herewith presents its twenty-second annual report, covering the fiscal year beginning October 1, 1909, and ending September 30, 1910.

ALBERT WARREN FERRIS, M. D.,
SHELDON T. VIELE,
WM. CARY SANGER,

Commissioners.

REPORT

GENERAL OPERATIONS

The whole number of committed insane in the public and private hospitals of the State on September 30, 1910, was 32,658, divided as follows: Men, 15,655; women, 17,003. The whole number of insane in the State hospitals, including the inmates of the Matteawan and Dannemora hospitals for insane criminals (1,161), on September 30, 1910, was 31,606. The whole number of the insane in licensed private institutions was 1,052. The net increase for the year in all institutions was 1,119; in the State hospitals, including the criminal asylums, 1,116; exclusive of the latter institutions, 1,082. In the licensed private institutions an increase of three for the year was reported.

The operation of the hospitals and the results of treatment during the year may be summarized as follows:

Number of first admissions during the year.....	5,598
Number of relapsed cases readmitted.....	1,465
Total	7,063

From the fourteen State hospitals there were discharged as recovered, 1,588 patients; as much improved, 396 patients; as improved, exclusive of transfers, 854 patients. Two thousand five hundred and twenty-six patients died during the year. The daily average population of the fourteen State hospitals was 29,919. Of the admissions, 33 were found to be cases of inebriety, 9 were simple drug habitués and 59 were found to be not insane within the meaning of the statute.

Of the 30,445 patients remaining in the State hospitals on the first day of October, 27,950 were supported by the State, 2,243 paid the bare cost of maintenance (excepting cost of lodging), while 252 were rated as belonging to the private class.

During this year 255 persons, as against 152 last year, took advantage of the voluntary admission provision of the Insanity

Law and placed themselves under treatment in the State hospitals. Of this number the majority were public patients.

FINANCIAL OPERATIONS

The following summary of financial operations gives a record of only those sums actually disbursed during the year ending September 30, 1910, for the support of the State hospital system, the State Commission in Lunacy, the medical inspector, the pathological (psychiatric) institute the State Board of Alienists, and the special agents and for the deportation of aliens and nonresidents, together with the balances in the hands of the treasurer of the State hospitals at the beginning and at the close of the year.

DETAILED REPORT OF THE TREASURER STATE HOSPITALS, OCTOBER 1, 1909, TO SEPTEMBER 30, 1910

Receipts

Balance on hand, October 1, 1909.....	\$1,136 04
From State treasury for maintenance.....	6,189,620 20
From reimbursing and private patients.....	400,525 73
From interest hospital accounts (local banks)....	347 04
From interest treasurer State hospitals account..	6,538 92
From stewards' sales	8,271 86
From attorneys (costs in committee proceedings)..	5,005 47
From ferry receipts (Manhattan State Hospital)..	3,700 00
From sales of uniform materials.....	2,898 80
From refunds for overpayments and unclaimed wages	203 14
From State treasury for extraordinary improvements, new buildings, furniture, etc., and items not included in fixed charges and maintenance..	1,326,961 17
From refund of payment on relinquished Greenvale site applied on purchase of Mohansic site for Long Island State Hospital.....	41,910 00
From State treasury, balance of purchase money for Mohansic site, chapter 433, Laws of 1909..	93,650 44
From manufacturing departments (receipts)....	93,024 58
Total receipts	\$8,173,793 39

Disbursements

For maintenance (including \$408,318.97, which properly belonged in previous or following fiscal year, coal, etc.).....	\$6,068,261 73
For manufacturing (on maintenance account)....	106,202 93
For uniform materials (hospitals reimbursed)....	3,416 77
For new buildings, extraordinary repairs, renewals and improvements, furniture, and items not included in fixed charges and maintenance.....	1,326,961 17
For new site, Mohansic State Hospital, including survey	135,560 44
Remitted State Treasurer, chapter 561, Laws 1907 (miscellaneous receipts)	424,389 02
Remitted State Treasurer, chapter 561, Laws 1907 (manufacturing department receipts).....	93,024 58
Total disbursements	*\$8,157,816 64
Balance September 30, 1910.....	15,976 75

Unexpended Balances, October 1, 1910

Chapter 433, Laws 1909.....	\$33,750 26
Chapter 462, Laws 1909.....	554,218 29
Chapter 507, Laws 1910.....	771,688 03
Chapter 513, Laws 1910.....	222,347 58
Chapter 529, Laws 1910.....	100,000 00
Total	\$1,682,004 16

Maintenance Appropriations for Year Beginning October 1, 1910, as follows:

Utica	265,670 00
Willard	407,175 00
Hudson River	567,200 00
Middletown	378,125 00
Buffalo	373,745 00
Binghamton	426,875 00

* This amount includes over \$700,000 earned by the hospitals through caring for reimbursing patients during two years.

St. Lawrence	\$374,735 00
Rochester	271,660 00
Kings Park	615,280 00
Long Island	167,020 00
Gowanda	200,540 00
Manhattan	772,285 00
Central Islip	727,490 00
Total	<u>\$5,547,800 00</u>

Trust Funds

Trust estate held by the State Commission in Lunacy, under the provisions of the Insanity Law, section 7, paragraph 2, as amended by chapter 462, Laws of 1907.

In trust for Bertha Fahr, under the will of Charles Fahr (husband), principal, \$4,488.47, deposited in Fidelity Trust Company, Buffalo, N. Y., July 27, 1907, interest $3\frac{1}{2}$ per cent. from July 1st, payable quarterly. Interest rate, 4 per cent. from October 1, 1907.

Interest during year paid quarterly, as follows:

October 1, 1909	44 88
January 1, 1910	44 88
April 1, 1910	44 88
July 1, 1910	44 88

CARROLL F. SMITH,
Treasurer State Hospitals.

STATEMENT OF SPECIAL FUND EXPENDITURES FOR THE STATE HOSPITALS DURING YEAR ENDING SEPTEMBER 30, 1910

Disbursements for new buildings to be occupied by patients and employees	\$638,449 33
Disbursements for new buildings other than those to be occupied by patients and employees	207,350 68
Extraordinary repairs, renewals, improvements and furniture not included in fixed charges for maintenance	474,858 94
Total	<u>\$1,320,658 95</u>

**EXPENDITURES ON ADMINISTRATION, INSPECTION AND SCIENTIFIC
ACCOUNT DURING YEAR ENDING SEPTEMBER 30, 1910**

Commissioners' salaries and expenses.....	\$21,100 00
Salary of secretary	5,000 00
Salary of medical inspector.....	4,416 64
Expenses of medical inspector.....	816 07
Clerk hire	15,940 00
Temporary services	1,674 16
Engineering services	633 72
Deportation and transfer of patients.....	7,949 91
Special agents	10,570 89
Office expenses	5,990 68
Psychiatric Institute.....	28,983 09

State Board of Alienists:

Salaries	12,708 29
Expenses	576 94
Interpreters	1,091 94
Office expenses.....	1,514 11

Total expenditure	\$118,966 44
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ESTIMATES FOR THE YEAR 1911-12

As required by statute, the Commission presents herewith the estimates of the total amounts required for the maintenance of the State hospital system, or the State Board of Alienists, of the Psychiatric Institute of the State hospitals, and the State Commission in Lunacy for the year beginning October 1, 1911.

It estimates that for the year beginning October 1, 1911, the average daily number of patients will be 32,200, and the average daily number of officers and employees 5,800. It respectfully requests an appropriation of \$6,253,000 to cover the fixed charges of the institutions, viz., all items of maintenance, including salaries and wages of employees, clothing, medical supplies, etc.

For the maintenance of the large manufacturing departments at Utica and Rochester an additional appropriation of \$120,000 will be required.

For the maintenance of the State Commission in Lunacy, the Psychiatric Institute, the State Board of Alienists, deportation of aliens, expenses of special agents, etc., the sum of \$128,000 will be required; for the bureau of treasurer of the State hospitals \$13,000; and for a fund to conduct a campaign of research, education and field work directed toward the prevention of insanity \$10,000.

To the above should be added the following amounts required for extraordinary improvements and additions to existing establishments to meet, at least in part, the requirements of the year in the way of additional accommodations and for other purposes:

For additional accommodations and extraordinary improvements to existing buildings (see details following)	\$1,739,910 70
For emergency purposes (1 per cent of the total valuation of the State hospitals)	280,000 00
<hr/>	
Total amount required for extraordinary purposes	\$2,019,910 70
<hr/>	
Grand total required for all purposes	*\$8,543,910 70
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For convenience of comparison, the Commission presents in the succeeding pages the appropriation items desired by each hospital and which were presented to the Commission for consideration at the time of its fall inspection. The Commissioners carefully inquired into the actual necessity of each item and recognizing the difficulty of providing sufficient income to meet all the requirements of the institutions, has found it necessary to omit a very considerable number of the items contained in the original lists. It does believe, however, that not less than \$2,000,000 will be required for new buildings and extraordinary improvements to existing plants for the coming year.

* This amount is subject to change after conference with the legislative finance committees.

UTICA STATE HOSPITAL

	Original List	Revised List
Cold storage and ice plant with equipment	\$30,000 00	\$33,000 00
Land (300 acres at \$200)	60,000 00	.....
Tower for water softener	2,500 00	3,500 00
Painting acute hospital and nurses' home, walls	2,205 00	2,205 00
Paving road from York street	9,200 00	9,200 00
Laboratory building, mortuary and equipment	8,000 00	10,000 00
Crushed stone for roads, walks and gutters	1,250 00	.....
Unclimbable fences	850 00	
Outside painting, windows and guards	2,000 00	.....
Forcing house	3,500 00	.....
Remodeling present laundry	3,500 00	.....
New doors, windows and floors, wards 19, 20, 22, 24 and 26	1,500 00	.....
Gasolene agricultural engine	950 00	.....
Manure pit, "Graycroft"	1,650 00	.....
Farm horse stable	6,000 00	.....
Lighting "Graycroft"	2,500 00	.....
Louden litter and feed carrier, including track and equipment . . .	450 00	.....
New building for patients, "Graycroft," to accommodate 50, \$400 per capita	20,000 00	.....
Shrubs and trees	150 00	.....
Fly screens	500 00	.....
Manure spreader	115 00	.....
Total	<u>\$156,820 00</u>	<u>\$57,905 00</u>

WILLARD STATE HOSPITAL

	Original List	Revised List
Filtration plant for water supply..	\$45,000 00	.....
Sewage disposal plant.....	45,000 00	\$45,000 00
Improvements to heating system..	18,000 00	30,000 00
Laundry sorting room.....	8,700 00	8,700 00
Farm barn	7,000 00	.....
New verandas	3,000 00	3,700 00
Enlarging six sink rooms.....	2,750 00	6,720 00
Stone crusher	1,750 00	1,750 00
Total	\$131,200 00	\$95,870 00

HUDSON RIVER STATE HOSPITAL

	Original List	Revised List
Nurses' home at main building..	\$60,000 00	.....
Finishing and furnishing third floor of "Inwood" for use of attendants and nurses	15,000 00	\$15,000 00
Addition to reception hospital...	12,000 00	10,000 00
Addition at central group for 40 disturbed patients	28,000 00	28,000 00
Addition to steward's office.....	5,600 00	5,000 00
Clubroom and bowling alley for patients and employees.....	3,000 00	.....
Staff laundry and equipment....	10,000 00	10,000 00
Motor truck	3,600 00	3,600 00
Extension of water main.....	11,000 00	11,000 00
Staff house	30,000 00	35,000 00
Steward's house	9,000 00	.....
Roads and walks.....	3,200 00	3,200 00
Fences and gates.....	3,000 00	.....
Painting interior walls and trim of "Inwood" and "Reception Hospital"	6,000 00	6,000 00
Electrotherapeutic outfit	1,500 00	.....
Addition to main kitchen.....	3,000 00	.....
Roof over coal pockets.....	2,847 00	.....

	Original List	Revised List
Extension to electric lighting....	\$4,508 54	\$4,853 14
New telephone cables from the south wing to the "Reception Hospital" and new night-watch clock system at the cottages	1,670 16	1,325 56
Repairs to ward 25; additional spray baths in wards 23 and 24, and new guards, wards 26 and 27.	3,831 04	.....
Renovation of two cottages.	8,750 00	.....
Fire escapes at cottages and improvements to heating system..	8,400 00	.....
Attendant's house at cottages....	25,000 00	30,000 00
Poultry-house	1,562 78	.....
Cow barn	12,000 00	.....
Additional land	17,000 00	.....
Hospital for tubercular cases.	100,000 00	.....
Total	<u>\$389,469 52</u>	<u>\$162,978 70</u>

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL

	Original List	Revised List
Laboratory and mortuary building	\$10,000 00	\$10,000 00
Hydrotherapeutic outfit for acute pavilion	7,700 00	7,500 00
Addition to electric light plant...	6,500 00	6,500 00
Reconstruction of barns and new water connections	9,800 00	.....
Piggery and slaughter-house ..	4,000 00	2,000 00
Additional land, sixty acres.	4,000 00	4,000 00
Increased capacity of dining-room	60,000 00	60,000 00
Industrial shop and equipment..	7,000 00	7,000 00
Motor truck	3,500 00	3,500 00
New walks, fences and fence posts	3,500 00	.....
Paint for interior of new buildings	1,500 00	1,500 00

	Original List	Revised List
Additional equipment	\$5,000 00	.....
Ice house.	1,800 00	\$1,800 00
Additional land and moving switch	10,000 00	.....
Converting old boiler-house into shops, with equipment	8,000 00	.....
Equipment of new power-house..	25,000 00	46,000 00
New ovens in bakeshop.....	5,000 00	5,000 00
Conduits, steam mains and cables for new power-house.....	.....	24,000 00
Total	<u>\$172,300 00</u>	<u>\$178,800 00</u>

BUFFALO STATE HOSPITAL

	Original List	Revised List
Tuberculosis pavilion for men...	\$10,400 00	\$14,000 00
New verandas, men's and women's wards	7,500 00	7,500 00
Wilson farm and cottage.....	6,500 00	6,500 00
Refrigerating plant	19,000 00	19,000 00
Changing water-closets, wards 13, 14 and 15.....	1,000 00	1,000 00
Coal conveyor	6,500 00	6,500 00
Building for contagious diseases.	4,000 00	4,000 00
Extension to present bakery.....	4,500 00	4,500 00
Total	<u>\$59,400 00</u>	<u>\$63,000 00</u>

BINGHAMTON STATE HOSPITAL

	Original List	Revised List
Surgical pavilion and chemical laboratory	\$15,000 00	.....
Reconstruction of electric lighting system	60,000 00	\$60,000 00
Motor truck and ambulance.....	4,000 00	4,000 00
Bins and conveyors for coal.....	3,000 00	10,000 00
Club rooms for women employees.	5,000 00	.....

	Original List	Revised List
Painting	\$7,500 00	.....
Roads, walks and concrete flooring	3,000 00	\$3,000 00
Concrete machinery, forms, etc..	1,000 00	.....
Completion farm cottages; also tile floor in tuberculosis pa- vilion	3,000 00	.....
Rebuilding general storehouse...	4,500 00	4,500 00
Additional farming land	10,000 00	.....
Combination chemical and hose wagon	1,700 00	1,700 00
Farm fencing	1,000 00	.....
Total	<u>\$118,700 00</u>	<u>\$83,200 00</u>

ST. LAWRENCE STATE HOSPITAL

	Original List	Revised List
Building for carpenter and black- smith shop	6,500 00	8,000 00
Coal and ash handling machinery.	2,400 00	5,000 00
Steam main from boiler house to central group, complete with fit- tings and coverings	3,200 00	3,200 00
Two wings to employees' cottage..	32,000 00	.....
Enlarging boiler house and provid- ing conduits and piping to "In- wood" and dormitory; also ad- ditional boiler capacity.....	31,000 00	31,000 00
Trees and shrubs	500 00	.....
Tobey hot water heater for em- ployees' cottage	480 00	.....
Automobile ambulance	2,750 00	2,750 00
Protection to river bank.....	1,000 00	.....
New root cellar at garden cottage	2,000 00	2,800 00
Green house, including foundation, workhouse, benches and room for boiler; also heating and plumbing	3,180 00	.....

	Original List	Revised List
Addition to piggery	\$2,500 00	\$2,500 00
Painting, interior	1,159 00	.....
Furniture, carpets, etc.	500 00	.....
Addition to grand stand.....	800 00	.....
Locks for central group.....	1,036 00	.....
Cement walks	1,000 00	1,000 00
Furnace for "Invernith".....	138 25	.....
Cement floors	195 00	.....
Retaining walls and bottom for ra- vine	127 50	.....
Extending coal trestle at power house	2,500 00	.....
Grain reaper and binder, with truck	130 00	.....
Changes in dairy barn.....	351 00	.....
Addition to farm	10,500 00	.....
Total	<u>\$105,946 75</u>	<u>\$56,250 00</u>

ROCHESTER STATE HOSPITAL

	Original List	Revised List
Nurses' home (150)	85,000 00	.....
Building for contagious diseases.	6,000 00	4,000 00
Additions to patients' building at Lake Farm	7,500 00	.....
Re-plumbing north buildings....	5,000 00	.....
Verandas, mens' building	4,500 00	5,000 00
Industrial shops	8,000 00	8,000 00
Amusement hall and gymnasium.	27,000 00	30,000 00
Portable vacuum cleaner.....	1,850 00	1,850 00
Steam header main, 8 boilers....	2,000 00	2,000 00
Michael farm, 64½ acres.....	12,300 00	.....
Cement walks and paving.....	3,000 00	1,500 00
Additional furniture	2,500 00	2,500 00
Inside guards for men's disturbed ward	675 00	675 00

	Original List	Revised List
Cottage for 50 disturbed patients.	\$27,500 00	\$27,500 00
Re-wiring for electric lights in south section and center of old buildings	8,000 00	.....
Total	<u>\$200,825 00</u>	<u>\$83,025 00</u>

GOWANDA STATE HOSPITAL

	Original List	Revised List
Passenger automobile	\$3,000 00	.....
Addition to laundry and laundry machinery	7,200 00	\$7,200 00
Addition to kitchen	2,500 00	2,500 00
Mortuary and laboratory	10,000 00	11,000 00
Gas well	3,000 00	.....
Additional land, (80 acres)	10,000 00	.....
Total	<u>\$35,700 00</u>	<u>\$20,700 00</u>

KINGS PARK STATE HOSPITAL

	Original List	Revised List
Administrative building and additional accommodations for medical staff, including clinic room and library	\$35,000 00	.....
Electrical equipment for clinic room	1,350 00	.....
Fireproof building for industries.	30,000 00	.....
Flour storage building	12,000 00	.....
Laboratory and mortuary	12,000 00	.....
Fire house	14,000 00	\$14,000 00
Two new Dührkop ovens	3,200 00	3,200 00
Amusement hall	30,000 00	.....
Furniture, bedding and dining room equipment	42,057 00	42,057 00

	Original List	Revised List
Steel ceilings and plastered side walls, men's and women's cottages	\$22,145 00	.....
Painting, inside and outside of buildings	2,000 00	.....
Renovating first floor, nurses' home, etc.	4,804 00	.....
Improving heating system	3,715 00	.....
Crushed stone for resurfacing boulevard	1,500 00	\$1,500 00
Sorting boxes, tables, etc., new laundry	1,400 00	.....
Hydrotherapeutic bath rooms, buildings B & C	2,200 00	2,200 00
Re-wiring buildings A, B, C and D	18,000 00	.....
Vitrified underground conduit	3,500 00	.....
Five dormitories, each to accommodate 75 patients, and equipment	48,575 00	48,575 00
Addition to refrigeration plant	6,000 00	6,000 00
Ice making machinery	8,000 00	8,000 00
Changes in cold storage facilities	3,500 00	3,500 00
Remodeling old boiler house and reconstructing electric light plant	85,000 00	85,000 00
Telephone wiring and telephones in new chronic cottages, kitchen and dining rooms	3,000 00	750 00
Three new boilers	9,600 00	9,600 00
Total	<u>\$402,546 00</u>	<u>\$224,382 00</u>

LONG ISLAND STATE HOSPITAL

	Original List	Revised List
Repairs and alterations, main building, including construction, plumbing and heating	\$32,000 00	\$30,000 00

	Original List	Revised List
Dining room and kitchen building, including equipment	\$75,000 00	\$66,000 00
Power plant, including construc- tion, steam and electric work...	53,000 00	.....
Outside work, including conduit construction (3,000 ft.), steam piping, electric cables, sewer and water	58,000 00	.....
Laundry, including equipment...	40,000 00	.....
Storehouse, general and cold stor- age, with equipment.....	30,000 00	20,000 00
Industrial building	20,000 00	.....
Shops	9,000 00	.....
Stable	8,000 00	.....
Laboratory and mortuary.....	14,000 00	8,000 00
Administration	28,000 00	.....
Two open recreation pavilions....	5,000 00	2,500 00
Amusement hall and chapel.....	35,000 00	.....
Reception building (200 patients).	200,000 00	.....
Two convalescent cottages (25 pa- tients each).....	50,000 00	.....
Two nurses' homes.....	50,000 00	.....
Steward's residence	14,000 00	.....
First assistant physician's resi- dence	14,000 00	.....
Superintendent's residence.....	23,000 00	.....
Fence (8,700 feet by 33 feet)...	26,100 00	.....
Staff house	30,000 00	.....
Grounds	15,000 00	.....
Total	<u>\$829,100 00</u>	<u>\$126,500 00</u>

MANHATTAN STATE HOSPITAL

	Original List	Revised List
Floors and doors in main building, east, and east building.....	\$2,500 00	\$2,500 00
Cement and broken stone.....	3,250 00	3,250 00

	Original List	Revised List
Furniture	\$5,000 00	\$8,000 00
Iron beds	2,835 00	.....
East dock	7,750 00	8,000 00
Steam kettles, kitchen equipment.	2,200 00	1,650 00
Painting	5,000 00	.....
Carpenter shop machinery.....	500 00	.....
Engineering shop machinery.....	2,300 00	.....
Power truck, gasoline.....	3,000 00	3,500 00
Addition to assembly hall.....	8,000 00	.....
Training school and nurses' home (150 nurses).	100,000 00	.....
Electro-therapeutic equipment ...	1,250 00	.....
Medical library	1,000 00	.....
Greenhouse extension	2,000 00	.....
Buildings for 200 patients includ- ing kitchen and dining room fa- cilities	150,000 00	.....
Mortuary	10,000 00	15,000 00
Increasing the capacity of the elec- tric light plant.....	10,000 00	.....
New locks	7,500 00	7,500 00
Underground conduits	10,000 00	10,000 00
Roof repairs	21,250 00	34,500 00
Extension to refrigerating plant..	9,583 75	10,000 00
Replacing steam and return lines between wards 13 and 22.....	1,804 46	2,000 00
Additional accommodations, tuber- cular patients.....	10,000 00	10,000 00
Total	\$376,723 21	\$115,900 00

CENTRAL ISLIP STATE HOSPITAL

	Original List	Revised List
Group for reception and acute cases	\$200,000 00	.....
Enlarging amusement hall.....	8,000 00	.....
Extensions to "Group G" for dis- turbed patients	20,000 00	\$20,000 00

	Original List	Revised List
Three cottages for additional quarters for medical staff.....	\$30,000 00	.....
Extension to bakery and new oven.	4,910 00	\$5,400 00
Enlargement of first floor of administration building	10,000 00	.....
Equipment for new group, 600 patients	30,000 00	30,000 00
Equipment for kitchen and dining rooms, new group.....	20,000 00	20,000 00
Recreation pavilion for patients..	984 00	.....
Continuation of cement walks....	1,000 00	1,000 00
Tile floor for three bath rooms, north colony attendants' home..	286 00	.....
New steam line from "Group C" to stables, including brick conduit	205 00	.....
Additional provisions for tubercular patients .....	.....	10,000 00
Total	<u>\$325,385 00</u>	<u>\$386,400 00</u>

MOHANSIC STATE HOSPITAL

For development of building operations, including railroad spur, power plant, storehouse and cold storage, bakery, laundry and farm barn..	\$385,000 00
Total	<u>\$1,739,910 70</u>
For miscellaneous repairs, improvements, emergencies and equipment.....	280,000 00
Total	<u>\$2,019,910 70</u>

MAINTENANCE COST.

For purposes of comparison of maintenance disbursements with those of previous years, the following statements for each of the past four years are herewith inserted.

Comparative statement of hospital expenditures for maintenance, assuming all bills paid, distributed in fiscal year periods
YEARS ENDING SEPTEMBER 30, 1907, 1908, 1909 AND 1910

CLASSIFICATION		Utica	Willard	Hudson River	Middletown	Elko	Boston	St. Lawrence
Officers' salaries.....	{ 1907	\$15,171 84	\$21,478 96	\$18,038 94	\$17,444 76	\$20,348 49	\$17,893 44	\$19,360 43
	{ 1908	15,473 31	21,010 45	22,378 27	18,469 44	19,460 82	18,881 23	19,405 89
	{ 1909	15,883 36	20,334 85	23,286 47	18,512 22	19,734 70	20,126 42	19,013 96
	{ 1910	17,745 82	20,698 04	26,378 76	19,909 11	18,967 11	20,624 53	19,756 00
Wages.....	{ 1907	95,409 99	170,778 51	172,505 96	92,636 27	120,072 43	115,998 96	126,963 87
	{ 1908	96,035 80	172,237 19	175,975 48	104,008 01	122,654 66	131,725 83	127,212 45
	{ 1909	103,585 07	175,572 52	196,946 54	114,710 69	125,917 51	147,913 89	129,782 85
	{ 1910	110,961 43	175,776 68	204,445 18	118,945 78	127,523 81	153,234 08	134,803 88
Provisions and stores.....	{ 1907	71,382 83	117,666 37	156,444 44	86,084 38	118,906 31	92,110 05	96,679 64
	{ 1908	72,401 96	123,850 86	154,941 31	107,627 29	129,865 74	116,747 01	100,197 20
	{ 1909	81,462 48	136,407 62	201,760 36	126,159 84	138,605 75	141,058 04	109,821 11
	{ 1910	89,321 62	135,641 24	208,839 92	132,038 10	140,937 15	151,044 17	114,322 03
Ordinary repairs.....	{ 1907	4,106 12	7,817 76	12,590 83	4,729 57	9,196 16	7,690 85	11,110 39
	{ 1908	2,582 97	7,267 46	8,376 41	5,594 14	6,363 17	6,201 65	10,439 61
	{ 1909	5,169 97	14,035 30	12,824 80	9,565 92	6,424 18	6,921 04	13,034 24
	{ 1910	6,298 70	9,819 48	14,550 86	4,923 21	9,237 15	7,435 52	9,644 21
Farm and grounds.....	{ 1907	7,959 96	10,344 40	11,850 75	5,944 01	1,721 57	8,890 74	10,110 88
	{ 1908	9,706 32	12,100 19	11,783 89	6,755 56	1,902 90	10,384 54	13,846 63
	{ 1909	9,349 65	15,288 45	15,894 89	6,221 39	2,344 56	13,853 72	15,337 14
	{ 1910	10,240 84	15,002 06	14,229 47	5,031 65	1,888 13	12,674 15	13,390 38
Clothing.....	{ 1907	5,460 28	17,552 98	14,905 92	5,063 59	10,871 11	9,600 85	11,894 56
	{ 1908	6,907 37	18,326 08	12,100 85	7,316 92	12,888 78	10,469 40	11,062 42
	{ 1909	7,241 36	18,411 95	18,471 02	9,183 68	14,570 71	15,638 37	12,447 89
	{ 1910	7,774 92	20,939 23	23,441 61	8,061 89	15,145 61	15,182 77	11,404 08
Furniture and bedding.....	{ 1907	5,628 27	13,411 67	14,139 06	6,669 43	11,325 05	5,921 20	10,621 12
	{ 1908	6,575 39	14,774 95	10,081 69	8,762 62	12,232 00	5,923 40	7,352 34
	{ 1909	5,886 44	12,275 25	14,711 11	8,547 39	13,710 71	9,336 58	9,896 09
	{ 1910	6,689 93	12,445 01	12,800 86	7,515 28	14,336 94	8,936 94	9,741 61

Books and stationery.....	{ 1907 1908 1909 1910	1,578 82 1,335 34 1,721 82 2,167 07	2,309 51 1,885 17 2,440 91 1,665 29	3,067 98 3,228 04 3,632 94 3,890 65	1,516 42 1,718 33 1,685 61 1,673 31	2,079 56 1,845 37 1,921 69 2,016 76	2,120 05 2,123 71 2,651 63 2,556 40	2,194 18 2,143 06 2,096 16 2,688 01
Fuel and light.....	{ 1907 1908 1909 1910	18,970 03 20,931 83 23,922 23 22,936 16	37,060 23 41,743 98 35,670 29 31,446 54	50,807 02 52,962 45 57,299 01 65,614 50	29,996 80 26,770 32 28,021 29 31,801 96	29,996 80 26,770 32 28,021 29 31,801 96	40,120 53 43,313 24 49,093 26 43,038 53	51,139 82 53,482 33 49,689 74 46,156 75
Medical supplies.....	{ 1907 1908 1909 1910	1,533 74 1,497 67 1,905 23 2,332 49	2,243 51 2,242 97 2,011 90 2,130 99	2,413 41 2,754 21 3,029 06 3,722 18	1,519 72 1,902 71 2,230 86 2,595 33	2,547 63 2,971 37 2,314 73 2,105 48	1,700 28 2,366 02 2,726 50 2,683 88	1,727 03 1,696 35 2,094 82 2,036 09
Miscellaneous expenses.....	{ 1907 1908 1909 1910	7,777 07 6,737 16 6,975 03 7,314 52	11,663 72 11,249 70 11,309 89 10,344 69	13,913 79 12,896 86 14,099 24 14,966 10	5,975 42 6,791 85 7,258 21 8,278 77	9,948 97 9,662 30 10,860 01 10,845 65	8,169 74 8,967 89 9,332 28 9,217 17	10,289 01 10,261 82 11,559 25 10,145 44
Transportation of patients.....	{ 1907 1908 1909 1910	1,637 27 1,831 21 2,122 94 1,875 85	2,709 14 2,738 99 3,052 37 3,019 03	5,667 92 4,733 16 4,787 46 5,049 97	985 54 1,193 62 1,147 17 968 00	887 27 1,062 27 1,054 92 996 05	2,046 76 2,266 05 2,390 38 2,350 90	4,890 88 5,184 20 4,468 83 4,634 20
Total cost.....	{ 1907 1908 1909 1910	236,616 22 241,916 33 265,225 58 285,659 35	415,036 76 429,427 99 446,811 30 438,928 28	476,346 62 472,202 02 566,742 90 597,919 76	249,958 73 295,528 66 332,848 08 341,742 39	337,902 34 347,669 70 367,380 76 372,705 26	312,253 45 359,370 02 421,043 01 428,979 04	356,972 43 362,284 30 379,242 18 378,722 77
Average daily population.....	{ 1907 1908 1909 1910	1,204 1,256 1,336 1,403	2,293 2,308 2,345 2,373	2,329 2,420 2,805 2,956	1,313 1,535 1,755 1,820	1,775 1,960 1,891 1,933	1,579 1,948 2,224 2,303	1,845 1,829 1,894 1,935
Per capita cost.....	{ 1907 1908 1909 1910	\$196 53 192 68 198 52 203 61	\$181 00 186 06 190 54 184 97	\$204 53 195 12 202 05 202 27	\$190 37 192 53 189 66 187 77	\$190 37 186 92 194 28 192 81	\$197 75 187 48 189 32 186 27	\$193 48 198 08 201 30 195 72

Fuel and light.....	{ 1907 1908 1909 1910	27,002 79 20,731 41 30,471 22 32,224 84	22,702 12 20,518 03 18,829 96 18,661 51	59,613 13 61,494 82 34,292 28 42,863 93	13,244 88 13,467 35 14,881 45 12,321 58	40,096 93 61,756 66 52,013 48 49,311 08	63,400 83 77,569 71 61,423 69 67,661 26	475,544 73 520,160 30 485,233 00 492,744 06
Medical supplies.....	{ 1907 1908 1909 1910	2,145 29 2,095 99 2,717 47 2,701 76	872 89 1,174 00 1,007 09 1,038 12	4,114 24 4,151 32 5,572 50 5,292 85	1,635 70 2,008 94 1,911 81 1,779 03	5,855 24 5,306 35 4,703 30 5,553 88	2,848 11 2,936 83 3,070 26 2,978 07	31,156 79 33,104 73 35,295 53 36,950 15
Miscellaneous expenses.....	{ 1907 1908 1909 1910	7,669 41 6,131 75 6,977 38 6,888 00	7,711 22 7,434 51 8,542 78 8,564 58	17,195 33 17,036 20 17,752 43 17,944 23	7,659 35 6,122 33 7,155 28 8,188 73	31,083 15 26,382 48 36,032 71 28,837 93	21,721 73 19,736 69 21,852 52 21,854 53	160,777 91 140,411 51 169,707 01 163,440 34
Transportation of patients.....	{ 1907 1908 1909 1910	382 73 509 24 568 63 521 93	1,571 74 1,230 04 1,295 94 1,142 91	2,831 65 3,202 80 2,187 56 2,401 86	130 11 156 08 281 99 124 10	285 60 381 83 573 98 540 19	2,539 37 3,458 39 3,499 37 3,160 57	26,555 98 27,947 89 27,331 54 26,785 56
Total cost.....	{ 1907 1908 1909 1910	257,982 52 244,223 74 284,848 33 294,335 88	169,596 86 182,552 38 196,897 08 198,030 42	566,719 25 566,974 77 567,840 92 590,837 43	178,507 82 164,565 38 174,079 53 178,841 43	762,025 25 788,880 43 820,409 88 835,596 33	628,891 47 645,294 39 686,394 58 717,641 93	4,948,809 72 5,100,890 11 5,509,764 13 5,659,942 76
Average daily population.....	{ 1907 1908 1909 1910	1,282 1,348 1,378 1,401	903 991 1,010 1,073	3,127 3,146 3,106 3,227	725 725 750 751	4,377 4,466 4,488 4,580	3,866 3,824 3,869 4,164	26,618 27,656 28,841 29,919
Per capita cost.....	{ 1907 1908 1909 1910	\$201 23 181 17 206 71 210 09	\$187 81 184 21 194 94 184 56	\$181 23 180 22 182 83 183 09	\$246 22 226 98 232 11 238 14	\$174 10 176 64 182 80 182 45	\$162 87 168 75 177 41 172 34	\$185 92 184 44 191 04 189 18

Annual per capita cost of maintenance, assuming all bills paid, distributed in proper fiscal years

YEARS ENDING SEPTEMBER 30, 1907, 1908, 1909, and 1910

CLASSIFICATION	Year	Utica	Willard	Hudson River	Middletown	Buffalo	Binghamton	St. Lawrence
Officer's salaries.....	{ 1907	\$12 60	\$9 37	\$7 75	\$13 29	\$11 46	\$11 33	\$10 49
	{ 1908	12 32	9 10	9 25	12 03	10 46	9 09	10 61
	{ 1909	11 89	8 67	8 30	10 55	10 44	9 05	10 09
	{ 1910	12 65	8 72	8 92	10 94	9 81	8 96	10 21
Wages.....	{ 1907	79 24	74 48	74 06	70 55	67 65	73 46	68 82
	{ 1908	76 46	74 63	72 72	67 76	65 94	67 62	69 55
	{ 1909	77 53	74 87	70 21	65 36	66 59	66 51	68 89
	{ 1910	79 09	74 07	69 16	65 35	65 97	66 54	69 67
Provisions and stores.....	{ 1907	59 29	51 32	67 17	65 56	66 99	58 33	52 40
	{ 1908	57 64	53 66	64 03	70 12	69 82	59 93	54 78
	{ 1909	60 97	58 17	71 83	71 89	73 30	63 43	58 29
	{ 1910	63 66	57 16	70 65	72 55	72 91	65 59	59 08
Ordinary repairs.....	{ 1907	3 41	3 41	5 40	3 60	5 18	4 98	6 02
	{ 1908	2 06	3 15	3 46	3 64	3 42	3 18	5 71
	{ 1909	3 87	5 99	4 57	5 45	3 40	3 11	6 92
	{ 1910	4 49	4 14	4 92	2 71	4 78	3 23	4 98
Farm and grounds.....	{ 1907	6 61	4 51	5 09	4 53	97	5 62	5 48
	{ 1908	7 73	5 24	4 87	4 40	1 02	5 33	7 57
	{ 1909	7 00	6 52	5 67	3 54	1 24	6 23	8 14
	{ 1910	7 30	6 32	4 81	2 76	1 98	5 50	6 92
Clothing.....	{ 1907	4 54	7 66	6 40	3 86	6 12	6 08	6 45
	{ 1908	5 42	7 94	5 00	4 77	6 93	5 37	6 05
	{ 1909	5 42	7 85	6 59	5 23	7 71	6 61	6 61
	{ 1910	5 54	8 82	7 93	4 43	7 84	6 59	5 89
Furniture and bedding.....	{ 1907	4 67	5 85	6 07	5 08	6 38	3 75	5 76
	{ 1908	5 24	6 40	4 15	5 71	6 58	3 04	4 02
	{ 1909	4 41	5 23	5 24	4 87	7 25	4 20	5 25
	{ 1910	4 77	5 24	4 33	4 13	7 42	3 88	5 03

Books and stationery.....	{ 1907 1908 1909 1910	1 31 1 06 1 29 1 54	1 01 1 82 1 04 1 70	1 32 1 33 1 30 1 32	1 15 1 12 1 96 92	1 17 1 90 1 02 1 04	1 34 1 09 1 19 1 11	1 19 1 17 1 11 1 39
Fuel and light.....	{ 1907 1908 1909 1910	15 76 16 67 17 91 16 35	16 16 18 09 15 21 13 25	21 82 21 90 20 43 22 20	16 29 16 54 15 74 17 47	16 90 14 39 15 88 14 85	25 41 22 23 22 07 18 69	27 72 20 24 24 37 23 85
Medical supplies.....	{ 1907 1908 1909 1910	1 27 1 19 1 43 1 68	98 97 86 90	1 04 1 14 1 08 1 28	1 16 1 24 1 27 1 43	1 44 1 60 1 22 1 09	1 08 1 21 1 23 1 17	94 93 1 11 1 05
Miscellaneous expenses.....	{ 1907 1908 1909 1910	6 46 5 36 5 22 5 21	5 09 4 87 4 82 4 36	5 97 5 33 5 03 5 08	4 55 4 42 4 14 4 55	5 61 5 19 5 74 5 61	5 17 4 60 4 20 4 00	5 58 5 61 6 14 5 24
Transportation of patients.....	{ 1907 1908 1909 1910	1 36 1 46 1 59 1 34	1 18 1 19 1 30 1 27	2 43 1 96 1 71 1 71	75 78 65 53	50 57 48 52	1 30 1 16 1 07 1 02	2 65 2 83 2 37 2 39
Total.....	{ 1907 1908 1909 1910	196 53 192 61 198 52 203 61	181 00 186 06 190 54 184 97	204 53 195 12 202 05 202 27	190 37 192 53 189 66 187 77	190 37 186 92 194 28 192 81	197 75 184 48 189 32 186 27	193 48 198 08 201 30 195 72

Annual per capita cost of maintenance, assuming all bills paid, distributed in proper fiscal years—(Concluded)

YEARS ENDING SEPTEMBER 30, 1907, 1908, 1909, AND 1910

CLASSIFICATION	Year	Rochester	Gowanda	Kings Park	Long Island	Manhattan	Central Islip	All hospitals
Officers' salaries.....	{ 1907	\$12 45	\$15 32	\$8 18	\$18 83	\$9 89	\$6 19	\$9 99
	{ 1908	11 74	14 94	7 59	19 33	10 10	6 86	9 93
	{ 1909	13 47	13 84	8 47	18 22	10 48	7 24	9 89
	{ 1910	14 09	14 04	8 64	17 12	9 97	7 93	9 97
Wages.....	{ 1907	67 97	68 20	59 65	89 15	61 03	50 95	66 06
	{ 1908	68 06	65 93	62 81	72 81	61 06	54 36	65 73
	{ 1909	70 44	70 41	66 01	71 64	62 10	55 78	66 43
	{ 1910	70 89	68 29	63 94	71 66	61 33	55 07	65 80
Provisions and stores.....	{ 1907	68 68	48 93	66 30	86 53	64 08	59 35	62 04
	{ 1908	61 42	50 53	68 19	89 01	67 61	62 05	63 52
	{ 1909	68 04	52 28	70 88	89 25	70 61	70 97	68 02
	{ 1910	72 89	52 56	72 85	92 10	73 52	67 00	68 54
Ordinary repairs.....	{ 1907	3 78	3 42	4 85	4 23	5 94	5 79	4 95
	{ 1908	2 61	3 27	2 45	3 43	2 69	3 02	3 16
	{ 1909	2 75	4 69	2 96	4 37	4 56	5 24	4 52
	{ 1910	2 75	3 64	1 94	11 94	4 71	4 02	4 12
Farm and grounds.....	{ 1907	5 09	6 66	3 18	3 10	2 45	2 81	3 88
	{ 1908	4 50	9 99	2 79	2 94	2 39	3 40	4 20
	{ 1909	5 15	10 23	3 52	4 11	2 62	2 67	4 57
	{ 1910	3 00	9 08	3 23	3 62	2 33	2 70	4 06
Clothing.....	{ 1907	8 10	4 22	6 47	5 53	7 40	8 81	6 77
	{ 1908	6 32	4 51	4 82	3 29	6 70	7 86	6 13
	{ 1909	9 13	6 15	6 47	4 22	6 00	7 93	6 79
	{ 1910	8 54	4 80	6 48	5 12	6 83	8 10	6 98
Furniture and bedding.....	{ 1907	4 16	3 08	4 77	5 49	4 72	4 67	5 01
	{ 1908	3 61	4 17	3 24	4 67	4 15	3 46	4 34
	{ 1909	5 75	6 20	4 11	6 18	4 29	3 46	4 81
	{ 1910	6 59	3 40	3 58	5 09	4 30	3 71	4 53

Books and stationery.....	{ 1907 1908 1909 1910	1 98 1 05 1 05 1 11	1 60 1 29 1 39 1 27	1 04 1 03 1 16 1 21	2 00 1 50 1 81 1 63	93 93 1 35 98	69 63 89 86	1 14 1 01 1 16 1 09
Fuel and light.....	{ 1907 1908 1909 1910	21 06 15 38 22 11 23 00	25 15 20 70 18 64 17 39	19 06 19 55 11 64 13 28	18 27 18 58 19 84 16 41	9 16 13 83 11 59 10 77	16 40 20 29 15 88 16 25	17 87 18 81 16 82 16 47
Medical supplies.....	{ 1907 1908 1909 1910	1 67 1 55 1 97 1 93	97 1 18 1 00 97	1 32 1 32 1 79 1 64	2 26 2 77 2 55 2 37	1 34 1 19 1 05 1 21	74 77 79 72	1 17 1 20 1 22 1 23
Miscellaneous expenses.....	{ 1907 1908 1909 1910	5 98 4 55 5 06 4 92	8 54 7 50 8 46 7 98	5 50 5 42 5 72 5 56	10 56 8 44 9 54 10 90	7 10 5 91 8 03 6 31	5 62 5 16 5 65 5 25	6 04 5 40 5 88 5 46
Transportation of patients.....	{ 1907 1908 1909 1910	30 38 41 37	1 74 1 24 1 28 1 07	91 1 02 70 74	18 22 38 17	07 09 13 12	66 90 90 76	1 00 1 01 95 90
Total.....	{ 1907 1908 1909 1910	201 23 181 17 206 71 210 09	187 81 184 21 194 95 184 56	181 23 180 22 182 82 183 09	246 22 226 99 232 11 238 14	174 10 176 64 182 80 182 45	162 67 168 75 177 41 172 34	185 92 184 44 191 04 189 18

Average purchase price and annual per capita cost of staple articles of consumption in the State hospitals during the year ending September 30, 1910
(As reported by superintendents of respective hospitals)*

STAPLE ARTICLES	UTICA		WILLARD		HUDSON RIVER		MIDDLETOWN	
	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost
Fresh meats, per pound.....	\$0.0810	\$15.30	\$0.069	\$14.826	\$0.0777	\$15.4032	\$0.080	\$13.153
Poultry, per pound.....	.1823	34	.132	347	.1049	.6170	.193	544
Wheat flour, per barrel.....	4.7619	7.72	4.785	15.348	4.823	6.9589	4.923	7.324
Butter, per pound.....	.2863	10.89	.275	11.299	.2805	9.7068	.283	12.176
Cheese, per pound.....	.3868	58	.143	11.921	.1318	.9691	.147	2.887
Eggs, per dozen.....	.2242	3.60	.221	3.456	.3271	2.6490	.193	2.887
Tea, per pound.....	.1447	4.44	.1426	3.488	.1427	.4181	.142	2.887
Coffee, per pound.....	.1068	1.43	.112	1.530	.1090	1.3225	.109	1.321
Sugar, per hundred weight.....	4.9583	2.07	5.064	2.889	4.9709	2.5760	5.014	2.792
Milk (fresh), per gallon.....	2.0124	14	1.591	.055	.1772	6.9045	.176	9.718
Liquor, per gallon.....	3.1120	14.44	2.620	13.384	1.5873	.1288	3.284	.055
Coal, per ton.....					3.4446	21.5768	3.112	15.026

* Mohanic State Hospital, no report for this year, opened June 16, 1910, 12 patients.

† Also wheat flour per barrel made from local wheat, \$3.949 average purchase price; \$.267 annual per capita cost.

Average purchase price and annual per capita cost of staple articles of consumption in the State hospitals during the year ending September 30, 1910 — (Continued)

STAPLE ARTICLES	BUFFALO		BINGHAMTON		ST. LAWRENCE		ROCHESTER	
	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost
Fresh meats, per pound.....	\$0.08	\$13.965	\$0.079	\$15.79	\$0.0877	\$16.7744	\$0.0803	\$16.056
Poultry, per pound.....	.17	.448	.17	.417	.2281	3.766	.1552	.430
Wheat flour, per barrel.....	4.644	5.947	4.764	6.894	4.776	6.234	4.7361	6.332
Butter, per pound.....	.285	10.617	.286	11.453	.2808	9.3167	.2827	13.554
Cheese, per pound.....	.152	.978	.147	1.154	.1195	.905	.1487	.654
Eggs, per dozen.....	.222	3.160	.233	5.172	.2093	3.7982	.2252	2.646
Tea, per pound.....	.143	.658	.143	.477	.1411	.3885	.1429	.460
Coffee, per pound.....	.111	1.267	.113	1.448	.1129	1.4035	.1096	1.268
Sugar, per hundred weight.....	5.047	2.787	5.000	2.776	5.15	2.7196	5.0845	2.824
Milk (fresh), per gallon.....	.153	9.275	.128	7.871	.154	.8653	.1679	10.953
Milk, (condensed), per gallon.....		.0391		.164		.1652		.291
Liquor, per gallon.....	1.645	14.256	1.897	17.627	1.637	23.1467	1.9587	22.223
Coal, per ton.....	1.85		2.158		3.1807		2.9671	

Average purchase price and annual per capita cost of staple article : of consumption in the State hospitals during the year ending September 30, 1910 — (Concluded)

STAPLE ARTICLES	GOWANDA		KINGS PARK		LONG ISLAND		MANHATTAN		CENTRAL ISLIP	
	Average per price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost
Fresh meats, per pound.....	\$0.086	\$11.53	\$0.0616	\$14.766	\$0.7903	\$15.93	\$0.0828	\$17.329	\$0.081	\$15.522
Poultry, per pound.....	.15	.531	.182	.652	.1893	1.026	.1861	.858	.081	.455
Wheat flour, per barrel.....	4.89	6.796	4.7556	7.044	5.292	8.38	4.93	6.615	4.87	6.82
Butter, per pound.....	.282	9.377	.2767	12.477	.2768	11.325	.2774	12.142	.285	10.351
Cheese, per pound.....	.15	.915	.1397	1.043	.1168	.956	.1405	1.081	.1411	1.218
Eggs, per dozen.....	.212	4.54	.2429	5.308	.232	4.531	.2244	4.504	.2358	3.902
Tea, per pound.....	.145	.435	.1429	.443	.143	.459	.143	.454	.1428	.415
Coffee, per pound.....	.107	1.27	.1074	1.489	.1111	1.381	.1228	1.70	.1089	1.432
Sugar, per hundred weight.....	5.174	3.09	4.9904	2.669	4.92	2.679	4.90	2.768	4.90	2.492
Milk (fresh), per gallon.....	.....	.....	.2099	2.583	.1924	7.482	.188	13.841	.228	.181
Milk (condensed), per gallon.....	.....	.....	.8392	7.074	.778	5.506	*.8016	*.345	.7616	8.995
Liquor, per gallon.....	.....	.....	1.9499	.061	.....	.....	2.0066	.039	1.95	.046
Coal, per ton.....	2.187	17.81	2.6703	13.029	3.5394	15.871	1.889	9.516	2.722	17.298

* Also concentrated milk per gallon, \$.6248, average purchase price; \$.2056 annual per capita cost.

Fuel and light, year ending September 30, 1910

(As reported by superintendents of respective hospitals)

STATE HOSPITAL	Total annual cost	Annual per capita cost	Total number of tons of coal consumed	Average purchase price of coal per ton
Utica.....	\$23,914.28	\$17.045	6,478.818	\$3.112
Willard.....	36,739.61	15.482	12,079.35	2.629
Hudson River.....	65,614.50	21.5768	18,516.3	3.4446
Middletown.....	28,681.13	15.768	8,783.	3.112
Buffalo.....	29,401.81	15.21	14,888.5	1.850
Binghamton.....	40,579.60	17.627	18,810.	2.158
St. Lawrence.....	45,913.78	23.732	14,078.8	3.1807
Rochester.....	31,725.54	22.645	10,493.15	2.9671
Gowanda.....	19,109.77	17.81	8,473.	2.187
Kings Park.....	42,045.46	13.0292	15,746.03	2.6703
Long Island.....	11,919.72	15.781	3,368.149	3.5884
Manhattan.....	45,735.33	9.9859	23,070.	1.889
Central Islip.....	72,028.43	17.298	24,462.5	2.722
Total.....	\$493,408.96	\$16.21	179,247.597	\$2.75

Medical Service

(As reported by the superintendents of respective hospitals)

STATE HOSPITAL	Number of physicians including superintendents and internes.	Number of patients to each physician	Annual per capita cost of medical service
Utica.....	9	156	\$10.68
Willard.....	12	197	7.879
Hudson River.....	19	164	8.9268
Middletown.....	10	182	10.232
Buffalo.....	10	193	8.78
Binghamton.....	14	164	8.281
St. Lawrence.....	13	148	8.9492
Rochester.....	9	156	11.81
Gowanda.....	7	153	11.339
Kings Park.....	19	170	9.28
Long Island.....	6	125	15.20
Manhattan.....	28	163	8.4947
Central Islip.....	21	198	7.54
Mohansic.....	1	12	.....
Total.....	178	1,709	.....

Employees

(As reported by superintendents of respective hospitals)

STATE HOSPITAL	A. ALL EMPLOYEES*				
	NUMBER			Number of patients to each employee	Annual per capita cost
	Men	Women	Total		
Utica.....	138	160	298	4.7	\$79.08
Willard.....	247	248	495	4.794	74.915
Hudson River.....	309	276	585	5	69.1627
Middletown.....	173	187	360	5.05	70.650
Buffalo.....	166	190	356	5.4	65.97
Binghamton.....	270	185	455	5	66.536
St. Lawrence.....	166	386	552	5	69.6784
Rochester.....	122	157	279	5	70.89
Gowanda.....	131	85	216	4.966	68.30
Kings Park.....	297	263	560	5.762	69.159
Long Island.....	81	79	160	4.69	71.606
Manhattan.....	404	373	777	5.76	60.7897
Central Islip.....	407	207	614	6.78	55.03
Mohansic.....	6	1	7	1.14	.....
Total.....	2,917	2,797	5,714	5.32	69.98

	B. NURSES AND ATTENDANTS			
	NUMBER			Number of patients to each nurse and attendant
	Men	Women	Total	
Utica.....	79	96	175	8.02
Willard.....	134	135	269	8.887
Hudson River.....	171	208	379	9.
Middletown.....	87	153	240	7.58
Buffalo.....	86	107	193	10.
Binghamton.....	185	147	332	6.9
St. Lawrence.....	75	155	230	8.411
Rochester.....	66	122	188	7.
Gowanda.....	66	62	128	8.38
Kings Park.....	159	230	389	8.2
Long Island.....	46	50	96	7.82
Manhattan.....	209	272	481	9.52
Central Islip.....	269	180	449	9.27
Mohansic.....	2	1	3	4.
Total.....	1,634	1,918	3,552	8.56

* Exclusive of medical service

NEW BUILDINGS PROGRESSED DURING THE YEAR

The most important building operations during the past year were those in connection with the three large groups of buildings, the first two located at Central Islip and Kings Park respectively and designed for the accommodation of 600 patients of the chronic class; the third group for 200 patients of the acute and chronic classes at the Manhattan State Hospital, Ward's Island. The buildings at Central Islip and Ward's Island have progressed very satisfactorily and promise to provide facilities for 800 patients during the coming winter. At the Kings Park State Hospital, however, the buildings have been delayed by the failure of the contractor who has gone into the hands of a receiver. It is impossible to say now when these buildings will be finished.

At the Central Islip State Hospital a nurses' home has been completed and 200 nurses are now installed in the building, which is of the same type as that at the Binghamton and Middletown State Hospitals, the latter having been occupied during the current year. The Staff House at the Central Islip State Hospital has also been completed and will provide accommodations for physicians who are at present quartered in a nearby hotel, owing to the grievous overcrowding of every building of this hospital.

The large building operations at the Middletown State Hospital have been practically completed with the occupancy of the day room annexes, the pavilion for 100 patients of the acute class, the contagious pavilion, the staff house and physicians' cottages and the completion of the bridge over the new highway.

At the Hudson River State Hospital, a new library building located near the Amusement Hall has been completed.

At the Utica State Hospital, a new laundry building has been constructed and only awaits equipment, and the new barn at the agricultural colony, "Graycroft," has been completed. At this institution a new water softening plant has been installed which has been reported satisfactory and economical in operation.

At the Buffalo State Hospital, the new house for the steward has been completed and also additions to the reception group of buildings.

At the Rochester State Hospital, the new sun rooms, dispensary and mortuary have been completed; also a new greenhouse.

At the St. Lawrence State Hospital, a new dormitory was opened during the year.

At the Kings Park State Hospital a new power-house, also the general laundry building and icehouse were completed.

The Commission is pleased to report further development and continued success of the summer camps at Binghamton, Rochester and Buffalo State Hospitals. Detailed references to these camps will be found in the respective State hospital reports.

In the tables given below the Commission shows the present capacity of each institution with the census of each at the close of the present fiscal year, September 30, 1910, together with a résumé of the accommodations provided for by appropriations already made; also to be provided from appropriations to be requested of the Legislature of 1911.

Statement of census and capacity of State hospitals October 1, 1910, additional accommodations to be provided by appropriations already made; with estimated population and capacity October 1, 1911.

CAPACITY AND CENSUS, OCTOBER 1, 1910

Hospital	Capacity			Census		
	Men	Women	Total	Men	Women	Total
Utica	718	725	1,443	689	743	1,432
Willard	1,147	1,210	2,357	1,159	1,219	2,378
Hudson River	1,242	1,583	2,825	1,300	1,717	3,017
Middletown	602	1,203	1,805	663	1,225	1,888
Buffalo	771	1,077	1,848	902	1,112	2,014
Binghamton	1,443	885	2,328	1,391	970	2,361
St. Lawrence	963	843	1,806	901	1,066	1,967
Rochester	500	805	1,305	577	853	1,430
Gowanda	527	445	972	559	520	1,079
Kings Park	1,171	1,713	2,884	1,306	1,965	3,291
Long Island	333	322	655	313	440	753
Manhattan	1,287	2,313	3,600	1,897	2,688	4,585
Central Islip	2,504	1,492	3,996	2,583	1,655	4,238
Mohansic	12	....	12	12	....	12
	13,280	14,016	27,896	14,252	16,193	30,445
Census						30,445
Capacity						27,896
Deficiency						2,549

Forward deficiency, October 1, 1910.....	2,549
Estimated net addition to population October 1, 1911	1,200
<hr/>	
Total deficiency to be provided for October 1, 1911	3,749
Additions available from funds on hand, appropriations of 1908, 1909 and 1910:	
Cottages for chronic patients, Central Islip	600
Cottages for chronic patients, Kings Park.	600
Cottages for chronic and acute patients, Manhattan	200
Mohansic State Hospital	50
<hr/>	
Total additions proposed.....	1,450
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Total estimated deficiency October 1, 1911.....	2,299
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It will be seen from the above table that at the close of the year there was a net deficiency in accommodations amounting to 2,549 beds; that with appropriations already in hand the Commission can provide 1,450 beds; that the normal net increase to 1912 will be 2,400 additional patients, and that with the 2,000 patients to be accommodated at the Mohansic State Hospital and in the new buildings now under construction, amounting to a grand total of 3,450, there will still be a net deficiency on the 30th of September, 1912, of 1,499 beds.

The overcrowding indicated in the Commission's special table, and which it does not seem possible to relieve even with the provision of accommodations in the new Mohansic State Hospital two years hence, will continue to be a menace to the successful operation of our hospitals. An additional hospital for the district of Kings county should be provided without further delay.

LEASE OF WARD'S ISLAND

The title to Ward's Island, on which is situated the Manhattan State Hospital, the largest hospital in the State, is in the city of New York. A fifteen-years lease made by the city for the nominal

rental of one dollar a year expires in 1912. By chapter 139 of the Laws of 1908, the city of New York was authorized to lease Ward's Island, to the State of New York for fifty years at an annual rental of one dollar, the lease being "conditioned on the part of the State that it will construct within ten years from the passage of this act a modern hospital for the care and treatment of the insane, in accordance with plans and specifications for the improvement and erection of buildings which shall have been submitted to the Board of Estimate and Apportionment of the City of New York and approved by it." The law also provides that the lease should contain a provision that in case of the termination of the lease or at the expiration thereof the city should pay to the State the value of all buildings which have been erected and of all improvements which have been made on the premises, the amount to be so paid to be determined by appraisement of five competent disinterested persons, two of whom shall be named by the Governor of the State of New York, two by the mayor of the city of New York and the fifth by the four persons so named, and the Comptroller of the State was authorized and directed to accept on behalf of the State a lease containing the foregoing provisions. This law was drafted so as to incorporate the recommendations of the report of the Special Hospital Committee appointed by Mayor McClellan and consisting of William Rhinelander Stewart, Eugene A. Philbin and Robert W. Hebbard.

A lease in accordance with the law has been prepared and has been submitted to the city authorities and is now awaiting their action.

It must not be forgotten in this connection that the State, during its occupation of Ward's Island under the lease from the city, has expended over \$1,100,000 in the erection or remodeling of buildings thereon, for the care of the insane of New York city.

The action necessary to complete the transfer will, it is hoped, be taken promptly and a report on the subject will be submitted later.

RECEPTION HOSPITAL, NEW YORK CITY

No developments occurred during the year in the location of a site for the proposed Reception Hospital in New York city. The site leased to the State by the city is, in the judgment of the Com-

mission, inappropriate and inadequate, and at the earliest opportunity an effort will be made to induce the New York city authorities to dispose of this site and to acquire another more favorably located.

MOHANSIC STATE HOSPITAL

By his act in signing the bill which became chapter 57 of the Laws of 1910, Governor Hughes constituted the Mohansic State Hospital upon the tract of 564 acres at Yorktown, N. Y., purchased by the Commission in Lunacy in the summer of 1909. The Governor appointed as a Board of Managers for the new hospital the following persons: Miss Helen M. Gould of Tarrytown, N. Y.; Miss Mary Flexner, of 365 Henry street, New York city; Frank Tucker, 264 Fourth avenue, New York city; John C. Clark, 34 Nassau street, New York city; Andrew J. Shipman, 37 Wall street, New York, and Dr. William D. Granger, Bronxville, N. Y., who has been a manager of the Hudson River State Hospital Board. The Board was organized by the election of Mr. Shipman as president and Miss Flexner as secretary. Subsequently, Governor Hughes appointed J. Howard Wainwright of Rye, N. Y., as the seventh member, in place of a gentleman who had declined to qualify under the appointment.

Immediate operations followed with a view to putting four of the seven farm houses on the tract into such condition as to provide for early occupancy; three of these farm houses were leased to the previous owners, and in the fourth was established a farmer and his wife into whose care was immediately transferred from Central Islip State Hospital, through the courtesy of Superintendent George A. Smith, a company of twelve male patients accustomed to out-of-door work. These patients immediately began to assist the farmer in raising crops upon the farms and in the repair of the farm buildings. Through the courtesy of Dr. Mabon, Superintendent of the Manhattan State Hospital, Dr. and Mrs. Herman C. Evarts spent three weeks at the farm house in general charge of the operations of the farmer and the patients and mechanics. Commissioner Ferris was appointed by the Commission in Lunacy Acting Superintendent without salary, to serve until the appointment of a superintendent from the eligible list resulting from a recent examination. In July Dr. Isham G. Harris, assistant physician of the Hudson River State Hospital.

was appointed superintendent of the Mohansic State Hospital and entered immediately upon his duties. Following plans drawn by the State Architect, changes have been made in four of the farm houses and heating and lighting plants have been installed and preparations made for the disposal of the sewage. One of the houses upon the tract has been remodeled with a view to making it a permanent staff house hereafter, while for the present it will be occupied by the Superintendent. Another has been remodeled for the permanent accommodation of farm patients, a third for temporary use of patients, while hereafter it is expected that it will be permanently used for the steward, and the fourth for the permanent accommodation of a small collection of appreciative patients. It is planned to transfer to this hospital early in the spring enough patients to aggregate fifty in all, to be employed as may be possible upon the preparation of the roadway for the railroad spur, the laying out and building of roads and paths and the excavations necessary for the first new buildings to be erected upon the site. Large parts of the arable land have been tilled during the summer and satisfactory crops have been harvested. Through the co-operation of Dr. R. M. Elliott, Superintendent of Willard State Hospital, a carload of young Holstein heifers was shipped from Willard to Mohansic, to form the nucleus of a herd at the new hospital. Plans have been started by the State Architect for the erection of the new buildings upon the tract and are now being discussed by the superintendent and members of the Commission.

The Legislature by chapter 529, Laws of 1910, granted an appropriation of \$100,000 for the commencement of work at this hospital, a portion of which has been expended for making the buildings on the property suitable for permanent use, as previously stated, and the State Architect has addressed himself actively to the provision of the necessary plans, many conferences having been held during the year between him and the Commission and officials of the New York Central railroad. The work of first importance in connection with the building operations will be the construction of a branch line from the Yorktown Heights station of the Putnam division of the New York Central to the point, over two miles distant, at which the larger buildings of the institution are to be concentrated. A portion of the grounds

already surveyed by the New York Central engineers has been found impossible to use for road bed except with the expenditure of a prohibitive sum of money. Accordingly new routes are being surveyed and the Commission hopes that not later than the spring of 1911 the construction of the necessary branch line may be begun, that the plans for the buildings may be completed, and that during the summer or fall of 1911 all of the work granted under the original establishing act appropriating two million dollars for construction may be let. This will mean that no additional patients, except additional squads of farm workers and others who can profitably be employed in grading can be transferred to the institution before the fall of 1912. Overcrowding of a serious character in the metropolitan hospitals demands the immediate erection of the Mohansic buildings.

TITLE TO LAND AND BUILDINGS AT FLATBUSH

In 1895 when the county of Kings gave up caring for its insane and the State assumed that responsibility, the lands and buildings then erected at Kings Park and now occupied by the Kings Park State Hospital were turned over to the State with the understanding that the State should use them as a branch institution for the care of the insane of Kings county. The property at Flatbush was leased for a period of five years with subsequent renewals of five years each. The last lease has not been renewed.

By chapter 718 of the Laws of 1904 certain officials were appointed a commission to select a site for the New York Training School for Boys, such institution to succeed to the work at present carried on by the Society for Reformation of Juvenile Delinquents on Randall's island.

The title to Randall's island was in the city, but the island was leased indefinitely to the above named society. By chapter 133 of the Laws of 1905 the duties of the Commission were extended, and the transfer to the State of the title to land at Flatbush, owned by the city but only leased to the State for the purposes of the Long Island State Hospital, was authorized as one of the considerations offsetting the release by the State of the property on Randall's island. Chapter 386 of the Laws of 1907 provided that the State authorities should release to the city whatever title to and interest in the so-called "Sunken Meadow" the State might have.

if any. Chapter 665 of the Laws of 1907 created a new commission in place of the old one, the new commission to consist of Dennis McCarthy, Isaac Townsend and Homer Folks. This commission secured the preparation by the Corporation Counsel of the city of New York of an agreement which was signed by the commission representing the State, and by the mayor, the comptroller, the city clerk of New York and the secretary and treasurer of the board of managers of the Society for the Reformation of Juvenile Delinquents, by which it was provided that various deeds were to be exchanged by which the title to the land at Flatbush on which the Long Island State Hospital is situated should vest in the State.

The question as to the ownership of the "Sunken Meadow" delayed the execution of the deeds. Correspondence running through the year has been had with the Attorney-General and with the mayor of the city, but the final determination of the matter and the execution of the deeds has not been secured.

Although the year closed without the completion of the plan of exchange of the above properties, the Commission is able to report that only a few minor obstacles remain in the way of the transfer which has been so long under consideration. With such transfer fully accomplished, the Commission repeats its earnest hope that the Legislature can furnish sufficient funds to permit of the remodeling of the present establishment at Flatbush and the construction of a branch institution at a point not too far remote from Brooklyn to permit its being reached by the friends of patients who may be committed thereto without undue expense. Should the Commission succeed in disposing of the 200 acres now in its possession located at Creedmoor at the price at which real estate experts have placed its future value, it should be possible to enter upon the construction of the branch institution within a year or two. Reference is made elsewhere to the extraordinary growth of the borough of Brooklyn, and every one who has given the matter sufficient attention must agree that no further time should be lost in providing accommodations for this rapidly increasing number of patients.

For a long time the Commission hesitated to spend the money actually needed to make the buildings of the Long Island State Hospital safe owing to this question as to title, but the fact that the

stairs in the buildings were of wood, the electric wiring had been condemned as dangerous and the plumbing had been pronounced unsanitary convinced the Commission that it was proper to secure an appropriation to make these absolutely necessary changes for the protection of the life and health of the patients. A bill was introduced appropriating \$100,000 and passed the Legislature, but was vetoed by the Governor as follows, and the statement was made by him that whatever changes were absolutely necessary should be made out of the special fund for extraordinary repairs and emergencies:

Memorandum filed with Assembly bill No. 16 entitled "An act providing for the reconstruction of the buildings of the Long Island State Hospital at Flatbush (Brooklyn), Long Island."

Not Approved.

The ultimate disposition of this property is uncertain. The questions that relate to it should be settled, and the title of the State, if it is to continue to hold the property, should be placed upon a secure basis before expenditures are made that are not absolutely required for occupancy meanwhile.

The repairs that are urgently needed may be provided for out of the contingent fund (\$250,000) which has been appropriated for the Commission in Lunacy.

In passing upon a bill for improvements for the hospitals for the insane I have called attention to the large amounts which we are expending this year in connection with these hospitals. A further appropriation as contemplated by this bill, in addition to the contingent fund already allowed, cannot in the circumstances be made.

(Signed) CHARLES E. HUGHES.

While the Commission hopes the settlement of all questions connected with the title of this property and its transfer to the State in the near future, it recognizes that in any event it will be many years before the patients could be removed from the hospital, and it has therefore decided to make such changes as are necessary to protect the health and the lives of the patients. These changes, which will of necessity be expensive, will include the rearrangement of the electric wires now considered exceedingly dangerous, the improvement of the plumbing, which is unsanitary, and the substitution of stone or metal stairs for the wooden ones, which are especially dangerous in case of fire. The amount necessary to do this work will be a very large proportion of the sum asked for in the bill above referred to.*

* Note, January 31, 1911.—The Commission has found it necessary, in order to render the Long Island State Hospital buildings safe and sanitary, to allot \$86,000 from its special fund for this purpose. It is believed at this time that a still larger total allotment must be made before the work of rewiring, erection of fireproof staircases and renewal of plumbing can be completed.

STATISTICAL DATA

The Commission would call the attention of the Legislature to the statistical tables included herewith. The graphic charts and more detailed tables will be transmitted shortly after the distribution of this report. It believes that with the unparalleled material at hand the State will be in a position within the next few years to deduce most valuable information from these continuing and carefully systematized studies.

CIVIL SERVICE APPOINTMENTS

During the year it has been necessary for the Commission to announce its position clearly on the subject of appointments to positions in the State hospital medical service from the eligible lists furnished by the State Civil Service Commission. Younger physicians who have repeatedly taken promotion examinations, and notably those who have acquired a position on the eligible list for first assistant physician, have for some years past complained that the likelihood of receiving appointments in the State hospital service to these higher positions depended in almost every case upon the point at which the vacancy occurred. The Commission believes that appointments should be promptly made from existing lists, and that the welfare of the patients and the institutions demands that prolonged vacancies should not be permitted. Conferences on the subject held during the year with some of the managers and Superintendents will, it is believed, help to establish a settled policy in this matter.

APPOINTMENTS OF FIRST ASSISTANT PHYSICIANS

The position of first assistant physician in all the hospitals is in the competitive class under the civil service rules. A list of those eligible for appointment to these positions was prepared by the Civil Service Commission on the 6th day of November, 1909. At this time there were no vacancies in the position of first assistant physician in any of the hospitals, and the list was prepared at that time because it was desired to avoid the possibility of having the candidates feel that the examination was being conducted for the purpose of filling a vacancy in any given hospital. The first vacancy, occurring at Kings Park State Hospital, was promptly filled by Superintendent Macy by the appointment of

Dr. C. Floyd Haviland from the eligible list. Five months after the lists were made public a vacancy occurred in another of the hospitals and six months later still another vacancy occurred. It so happened that the physicians in those two latter hospitals who were in line for promotion had not taken the examination, and the superintendents felt that in view of this fact and because there had been in former years a feeling that the examinations would be held for the specific purpose of filling any vacancy, no appointment should be made from the eligible list, but that the superintendent should wait until that list had expired and the doctors who had not taken the examination before, should have another opportunity to compete. The Commission does not agree with this view but as appointments are made by the superintendents and not by the Commission the appointments were not made, the list of eligibles expired and a new examination was held.

The Commission is strongly of the opinion that the best interests of the State and of the service are served by regarding the medical service in all the hospitals as a unit rather than by regarding the individual hospitals as units. Service in different hospitals by an assistant physician is considered by the Commission a very desirable part of the experience and training of the medical force; and the Commission hopes and believes that the thorough discussion of the question will result in the future in having it understood by the superintendents and by the assistant physicians that when an examination is held for promotion in any of the grades of the service, all those who may desire promotion will take the examination, and that appointments from the eligible list will be promptly made from it in accordance with the civil service rules and regulations. Some superintendents have felt that it was for the best interests of their hospitals to promote only their own men when any vacancy occurred. Such a course would limit the chances of any physician for promotion to the cases where death or resignation had caused a vacancy in the hospital in which he was serving. As the Commission is desirous of offering all proper inducements to well-qualified and competent physicians to stay in the service, they believe it would be fair and proper to offer to any physician in any hospital the chance to secure promotion in any one of the hospitals without limiting him to the particular hospital in which he may be serving.

CIVIL SERVICE ELIGIBLE LISTS

An eligible list from which superintendents may appoint physicians to the position of first assistant physician in hospitals for the insane, which was established November 6, 1909, by the State Civil Service Commission, contained the following names: Drs. James V. May, Binghamton; C. Floyd Haviland, Manhattan; Walter G. Ryon, St. Lawrence; Aaron J. Rosanoff, Kings Park; Ethan A. Nevin, St. Lawrence; H. G. Gibson, Jr., Central Islip; Donald L. Ross, Kings Park; Edward Gillespie, Binghamton; John W. Russell, Willard; John I. McKelway, Binghamton; Arthur J. Capron, Kings Park; Robert S. Macdonald, Danne-mora; Charles L. Vaux, Central Islip; R. F. C. Kieb, Matteawan; Roy L. Leak, St. Lawrence; Edward L. Hanes, Rochester; Dwight S. Spellman, Manhattan; Samuel W. Hamilton, Utica; Thomas J. Currie, Willard; Irving L. Walker, Rochester; and Keith Sears, Matteawan. Dr. Ethan A. Nevin was appointed superintendent of Newark Custodial Asylum; Dr. C. Floyd Haviland was appointed first assistant physician at Kings Park State Hospital to succeed Dr. George O'Hanlon, resigned.*

An eligible list covering the positions of medical inspector under the Commission and superintendents of State hospitals, was certified by the State Civil Service Commission to the Commission in Lunacy on July 1, 1910. This list contained the following names: Drs. Robert E. Doran, Willard; Isham G. Harris, Hudson River; George H. Torney, Jr., Utica; and Elbert M. Somers, St. Lawrence. From this list the Commission appointed Dr. Doran as medical inspector to succeed Dr. William L. Russell, who had become superintendent of Long Island State Hospital; and Dr. Isham G. Harris was appointed superintendent of the new Mohansic State Hospital at Yorktown, N. Y.

For the position of second assistant physician in the State hospitals an eligible list was established by the State Civil Service Commission October 5, 1910, consisting of the following names: Drs. James V. May, Binghamton; George W. Gorrill, Buffalo; Mortimer W. Raynor, Hudson River; Willis E. Merriman, Jr.,

* Dr. James V. May was appointed first assistant physician from this list, at Binghamton State Hospital, to succeed Dr. H. W. Eggleston, resigned, on November 5, 1910.

Hudson River; Joseph W. Moore, Central Islip; Joseph B. Betts, Buffalo; Edward L. Hanes, Rochester; Walter G. Ryon, St. Lawrence; Donald L. Ross, Kings Park; Walter H. Sanford, Matteawan; Frank R. Haviland, Manhattan; and Charles R. Vaux, Central Islip.

DIRECTOR OF THE PSYCHIATRIC INSTITUTE

Professor Adolf Meyer, M. D., LL.D., resigned his position as director of the Psychiatric Institute of the New York State Hospitals to become director of the new psychiatric hospital to be erected in connection with Johns Hopkins Hospital, Baltimore, Md., and was succeeded on February 1, 1910, by Dr. August Hoch. The Commission in Lunacy has appointed Dr. Meyer, Director Emeritus of the Institute.

Dr. Hoch was born in 1868, in Basel, Switzerland, whence, after attending public schools and the gymnasium there, he came to this country in 1887. After studying at the University of Pennsylvania for two years, and spending a summer in Osler's dispensary, he remained in Baltimore and was graduated from Maryland University in 1890, with a degree of M. D. The following year was spent in Johns Hopkins Hospital as well as in the physiological laboratory of the Johns Hopkins University. From 1890 to 1893, he was assistant in the medical clinic of Johns Hopkins under Professor Osler, and at the same time was assistant in the department for nervous diseases of the out-patients' clinic.

After spending the summer semester of 1893 at the University of Strassburg in Professor Schwalbe's Laboratory for the study of the anatomy of the nervous system, and in Professor von Recklinghausen's Laboratory for pathological anatomy, the winter semester, 1893 to 1894, was spent at Leipzig, in the psychological laboratory of Professor Wundt. The summer semester of 1894, was spent in Heidelberg in the clinic of Professor Kraepelin. From 1895 to 1905, Dr. Hoch was assistant physician at McLean Hospital, Waverly, Mass. During that time he spent one summer in Professor Nissl's Laboratory, and another summer in the laboratory of Professor von Monakow. From 1902 to 1905, he was also instructor in neuro-pathology at Tufts Medical School, Boston. From 1905 to 1909, he was first assistant physician and

special clinician at Bloomingdale Hospital, White Plains; and during the same time instructor in psychiatry at Cornell Medical School, New York City. Since the fall of 1909, he has been assistant professor of psychiatry at Cornell Medical School.

At the quarterly conference of superintendents with the State Commission in Lunacy held in April, 1910, physicians who have been connected with the service since Professor Adolf Meyer, the retiring director, took charge of the psychiatric institute, presented several gifts to him, in token of their appreciation of his services and as a proof of their affection for him.

INVESTIGATION OF PRIVATE INSTITUTIONS

It has been necessary during the year to make investigations of certain of the institutions licensed by the Commission. A protracted inquiry was made by the Commission as to the circumstances attending the treatment at the Marshall Sanitarium at Troy of Mr. Louis J. Gardner, who had been committed to that institution as a voluntary case by his friends living at Williamstown, Mass. This investigation was not finished at the close of the year, and the Commission's findings will be included in the next annual report.

REDUCING SIZE OF REPORTS

The State Commission in Lunacy in common with other State officials and citizens has recognized the desirability of omitting from official reports all matters not absolutely necessary.

Prior to 1910 it was required by the law that all the reports of the various hospitals should be printed in full in the annual report of the State Commission in Lunacy.

By chapter 111 of the Laws of 1910 the Commission was authorized to summarize these reports, and this was done in the last and has been done in the present report of the Commission.

Complete and unabbreviated copies of the single reports of each hospital may be obtained by writing directly to the hospital.

THE LEGAL WORK OF THE DEPARTMENT

During the last four years there have been five changes in the attorneys for the hospitals, and an improvement has been made in the general methods.

After examination for some time of the system employed in the collection of claims for reimbursing patients, the law commissioner prepared and the Commission issued a circular letter dated October 1, 1909, to the attorneys and superintendents by which a more efficient supervision of committees of patients and a more uniform practice in relation thereto was established. Owing to this order, to the services of hospital attorneys and agents, and to other contributing causes the collections of the department from reimbursing patients show a gratifying increase which is indicated by the following table:

Year.	Private patients.	Reimbursing patients.	Total.
1906	\$75,411 44	\$197,774 71	\$273,186 15
1907	75,227 99	224,677 05	299,905 04
1908	72,898 04	257,068 64	329,966 68
1909	77,988 77	279,994 89	357,983 66
1910	77,589 18	322,936 55	400,525 73

FIRE PROTECTION AT THE UTICA STATE HOSPITAL

In July, 1909, a proposal was made by the Consolidated Water Company of Utica for installing piping for fire protection on the hospital grounds for the sum of \$6,000. During the session of 1909 an appropriation for this purpose was obtained from the Legislature. The Consolidated Water Company proposed that after it had installed the necessary piping the State should pay \$600 a year for the privilege of using the company's water in case of fire, but with the express understanding that no water should be used for any other purpose. In addition to the plans prepared by the water company, the State Architect at the request of the Commission, prepared plans for the same purpose, and reported to the Commission that in his opinion the plans prepared by himself were better and would be less expensive. The Commission decided to install a system in accordance with the plans of the State Architect, and this was done.

The water company stated that although the State had installed the necessary piping it would make no change in its proposed price for the use of water as above set forth. The Commission

was of the opinion that it was not justified in paying this amount. It is proper to state that in the past fifty years the only fire of any importance at the Utica State Hospital occurred about twenty years ago and started in the laundry. It was extinguished in about an hour, no lives were lost and a few hundred dollars made good all the damage.

Since then there have been a few slight fires in the shops which have been quickly put out by pails of water or by the fire extinguishers. The buildings in which the patients reside are of stone and brick, with wood floors, doors, window casings, etc. The stairs are stone or iron. The only buildings of wood occupied by patients at any hospital is the Isolation Hospital for contagious diseases, a small cottage in which there are seldom more than two or three people at a time.* The Commission is deeply sensible of the need of adequate protection not only at Utica but in all the hospitals and will make every effort to secure it.

AUTOMOBILES

In several of the hospitals the superintendents have purchased automobiles out of their private funds. These have been used in many instances for official work in connection with the hospital service. In one instance, at Long Island State Hospital in 1908, an automobile was purchased by the State to be used for the transfer of patients to and from the hospital. It has been custom-

* Note, January 31, 1911.—The water company and the commission were unable to agree upon a price for the privilege of using the company's water in case of fire, as the Commission did not feel justified in paying \$600 and the company would not consent to a lower sum. On December 13th the following resolution was adopted by the board of managers at Utica State Hospital:

"Resolved, That in the opinion of the board a fair and full price per year to be paid by the State to the Consolidated Water Company of Utica for the privilege of connecting its water pipes with the fire protection system pipes of Utica State Hospital and of using such water as may be necessary in case of fire would be the sum of \$200 per year."

The Commission has been in frequent consultation with the board of managers on this subject and it appeared that a deadlock would result, and that the hospital would be deprived of the fire protection to which all agreed it was properly entitled. In order that this unfortunate condition might be terminated a temporary agreement was made with the company by which the State continues to pay \$75 for one hydrant on the ground of the hospital, a sum it has paid for a number of years, and \$225 from January until October 1, 1911, for the privilege of using the water for fire protection only.

It is believed that some agreement can be reached during the interim by which the hospital will be able to secure permanently the protection which comes from the connection with the mains of the Consolidated Water Company.

ary for the State to allow each superintendent the use of a team of horses and a coachman, and it was urged by the superintendents owning their own automobiles, that an allowance equivalent to the cost of the maintenance of a team of horses and a coachman should be allowed toward the expenses of the automobile owned by the superintendent.

Requests were also made for similar allowances in the case of stewards who owned their own automobiles and the Commission was asked to decide whether it would allow stewards automobiles for their official work or make some allowance to those stewards who owned and used their own automobiles.

The matter was very carefully considered by the Commission and it decided to sell the one automobile purchased for the Long Island State Hospital; to purchase no other automobiles for stewards or superintendents; to make no allowances for automobiles used by stewards, and in the case of superintendents owning their own automobiles to pay for the gasoline used in official work; to allow the amount of wages which would be paid to a coachman for those superintendents who owned their own automobiles, they paying, if necessary, from their private fund any excess over this amount for a chauffeur's wages; and to allow the sum of one hundred dollars a year for expenses to cover in part the wear and tear of a private automobile when used for State or official purposes.

These allowances have been deemed by some of the superintendents as inadequate, but the Commission has not felt justified in modifying its decision.

CO-OPERATION OF STATE CHARITIES AID ASSOCIATION

The Commission attaches much importance to the work of the State Charities' Aid Association in reporting on matters connected with the hospitals.

Examinations into the method of purchasing food and other supplies in this and other states are now being made under the direction of the Association and the results of these investigations are certain to be of great value to the Commission.

LEGISLATION DURING THE SESSION OF 1910

The first bill introduced by the Commission was one providing for appropriations of \$100,000 for rewiring, partial replumbing

and very extensive repairing of the old structure which has been leased by Kings county to the State for several years, and in which about seven hundred and sixty patients are housed. This bill was vetoed by the Governor for the reason that the property is not yet owned by the State, but belongs to the city of New York, and the lease has not been renewed. The present status of the negotiations for the acquirement by the State of the Long Island State Hospital, and of the acreage surrounding it, is set forth on pages 39-40. The Commission's action in authorizing the expenditure of the amount necessary to protect the health and safety of the patients is set forth on page 41.

An act to provide additional funds for the maintenance of the State hospitals and to supply deficiencies in the maintenance account which had been accumulating for three years, was passed by the Legislature and became chapter 98 of the Laws of 1910. During the years 1907-8-9 a deficiency arose in the maintenance account, in part owing to insufficiency in maintenance allotments and in part owing to the fact that the board moneys and miscellaneous receipts of the State hospitals for the year 1909, amounting to \$381,169.28, and the sum of \$400,000 derived from the same source during the year ending September 30, 1910, had not been appropriated for the use of the hospitals, while nevertheless the standards of food and care had been maintained by the Commission and the hospitals. In order to meet the deficiency, the Legislature was asked to appropriate the above sums and \$586,000, the amount estimated as necessary to wipe out the deficiency. The Legislature, however, reduced the \$586,000 to \$450,000, and in addition appropriated the board moneys for the years above referred to. It was estimated that this would leave the maintenance account about \$136,000 in arrears, but through the exercise by the superintendents of rigid economy, and with the assistance of falling market prices for staple articles of supplies, the deficit decreased to \$60,000 at the close of the year. This sum will be more than made up during the current year by continued economy and by the help of part of the sum appropriated for expected increase of wages, a sum which, owing to a veto by the Governor, could not be used for the purpose of increasing wages, but remained a part of the maintenance money of the several hospitals.

A bill was introduced by the Commission to provide for funds wherewith to construct a water filtration plant on the grounds of the St. Lawrence State Hospital at Ogdensburg, through the use of which plant pure water could be obtained from the St. Lawrence river, thus obviating the use of very inferior water from the Oswegatchie river whence the hospital receives its present supply. Previously to the passage of this act the Commission received assurance from the board of water commissioners at Ogdensburg to the effect that the city would install its own filtration plant and be in a position to deliver pure water to the hospital in less than a year at a fair price. (See p. 83.)

A bill was introduced to provide for the establishment of Mohansic State Hospital at Yorktown, N. Y., where a tract of 564 acres had been purchased, and upon which it was proposed to erect a hospital to receive part of the insane from the borough of Manhattan, New York City, and all of the insane from Westchester county, thus relieving the pressure upon Manhattan State Hospital and Central Islip State Hospital, and also Hudson River State Hospital to some extent. A measure creating a district for Mohansic State Hospital was passed and duly signed by the Governor. A bill was introduced subsequently to provide for the construction of hospital buildings on the new tract to provide for 2,000 patients and to be erected at a cost not to exceed \$2,000,000. By this bill the Commission was authorized to contract for the necessary buildings in this amount, and an initial appropriation of \$100,000 was made with which to commence operations.

The usual Omnibus bill was introduced covering several items of additional construction, new equipment, special engineering changes, laundry machinery, etc., as is customary each year.

The Commission assisted in the introduction of legislation to provide for the relief of persons under sentence of death when declared insane. This act provided: "If a defendant in confinement under sentence of death appears to be insane, the Governor may appoint a commission of not more than three disinterested persons to examine him, and report to the Governor as to his sanity at the time of the examination. * * *." This act became chapter 338 of the Laws of 1910, and the first person to benefit under it was the convicted murderer Luigi Gambacorta, then

under sentence of death in Auburn Prison, to examine whom the Governor appointed, as a special commission, Commissioner Ferris and Drs. Edward L. Hanes of Rochester State Hospital and Antonio Stella of New York City. The convict was found to be insane and was transferred by order of the Governor to Danemora State Hospital.

The Commission was also interested in assisting the attempt to secure legislation in criminal cases where persons under accusation were apparently insane. The bill introduced by Assemblyman Fowler, at the instance of the State Charities' Aid Association represented by Assistant Secretary Burritt, simplified the old code of Criminal Procedure in relation to proceedings when a person in confinement appears to be insane and provided that in certain instances such a person should be committed by the justice to a State institution for the care of the insane, there to remain until restored to his right mind, whereupon he shall be returned to the authority by which he was originally held in confinement, in order that the proceeding for which he was in such confinement shall then be resumed. This bill was enacted into law and became chapter 557.

Under chapter 111 of the Laws of 1910 the Commission was authorized to print in its annual reports, digests of the reports made to it by the various hospitals and by the State Charities' Aid Association, such reports being printed separately in full and distributed in that form, and the annual report being thus relieved of its recent large size and great weight.

A bill was enacted into law and became chapter 608, which provides for the care of the alleged insane pending commitment, and which places the responsibility for such care in the hands of the health officers in the place of the Poor Law officials, except in the counties of New York and Albany, in each of which counties there is a superintendent of public charities. This measure became necessary because of the fact that people with less medical intelligence than the health officers possess are in some counties prone to place insane patients, both men and women, in jails or lockups, merely as a matter of convenience and generally when it is absolutely unnecessary. Over 500 cases a year have been brought to our State hospitals from jails and lockups. A special circular is

issued by the Commission explaining the procedure under the amended law.

A bill providing for an increase in the wages of the nurses, attendants and supervisors of 10 per cent on the present rates was very strongly advocated by the Commission and its friends, and was passed by both houses. The money necessary to meet this increase was allotted by the committee on ways and means of the Assembly and the committee on finance of the Senate, and properly apportioned among the various hospitals in the several maintenance items. The Governor, however, vetoed the bill. The money allotted remained in the maintenance account.

This memorandum as to increase of wages of ward employees recommended by the Commission was sent to the Governor by the Medical Commissioner upon the passage of Senate bill No. 913 of 1910, which was entitled "*An act to amend section 50 of the insanity law relative to wages of nurses and attendants in state hospitals*" and which was vetoed by the Governor: "This bill provides for an increase in the wages of supervisors, nurses and attendants of ten per cent. over the present rate of wages which were prescribed by the legislature in 1904. Since then no increase in compensation had been made in spite of the fact of increased cost of living affecting so many employees with families dependent upon them. The employees of this class labor for twelve hours on a stretch, night or day. In a large proportion of instances they take their meals in great haste under very uncomfortable conditions, such as are necessitated by our overcrowding. Frequently the attendants eat in a dining-room, after the air in that room has been vitiated by the presence of uncleanly patients, and are only separated from those patients by a screen shoulder high. In a few instances, we have special nurses' homes, but in the vast majority of cases the nurses sleep in rooms off the wards or in rooms in the same corridors with patients' rooms, so that they are never free from the noise and general surroundings of the patients and have really no individual life.

"For nearly three years we have had extreme difficulty in filling vacancies at all, and we constantly have difficulty in securing the right class of persons for this service. Fifty per cent. of changes

occur annually. We feel that it is of the utmost importance to us at this time that this faithful class of public servants should receive an increase in their compensation. The increases here specified seem absurdly small, but it is felt that with the large demands for absolutely essential and necessary outlays by our department this year, they must be kept at a low figure. Every member of the Legislature who has given special attention to this subject agrees that for the particularly arduous service the increase asked for here is in no respect improper or unjustifiable. The necessary funds to provide for these increases were incorporated in the appropriation bill and are now available."

A bill was introduced to amend the Insanity Law, relative to reimbursement of the State for the support of inmates of State hospitals and the enforcement of the State's claim therefor. This bill became a law, forming chapter 389.

Another bill was successfully enacted into law which provided for a better definition of the relation of the Institute to the Manhattan State Hospital, upon whose grounds it has stood for many years, and providing further that the name should be changed from "Pathological Institute" to Psychiatric Institute, the new name having been for some years more descriptive of the work done at the Institute, since it is largely clinical, psychologic and psychiatric, and less exclusively histologic and pathologic than formerly. The bill also provided for the residence upon Ward's Island on the grounds of the Manhattan State Hospital of the director of the Institute and of such of the Institute staff as the Commission might from time to time direct.

A bill was passed and signed by the Governor providing for better security for the public against the unlicensed private institutions in which insane are unfortunately confined from time to time in successful defiance of the law. This amendment, which became chapter 239, prevents an unlicensed house from taking even a single insane person into an institution not exclusively maintained for the insane.

Chapter 776 provides that the institutions under the supervision of the Fiscal Supervisor or of the State Commission in Lunacy shall be able to call upon the Department of Agriculture for examination of food products and reports thereon.

The Insanity Law was amended under chapter 604 to provide that a member of the Board of Alienists under the State Commission in Lunacy would be qualified for appointment if he had had five years' experience in the care of the alleged or committed insane in this State or elsewhere, thus broadening the field and allowing the application as candidates of certain physicians who have had more experience with the matters of immigration than any of the physicians now upon the staffs of our State hospitals.

A bill was introduced into the Assembly to amend the Code of Civil Procedure relative to the issuance of writs of *habeas corpus* or *certiorari* in behalf of insane persons in State hospitals, providing that where an insane person has been committed to, or is detained in, a State hospital for the insane, or a State hospital for insane criminals, or a State hospital for insane convicts, by virtue of the judicial determination of his insanity by a competent tribunal of civil or criminal jurisdiction, and has been granted one writ, he shall not be entitled to another writ except under the conditions prescribed by the proposed section 93a of the Insanity Law. A similar bill was introduced into the Assembly to amend the Insanity Law to the same effect providing for the new section 93a, to which reference has been made, and which makes the following provisions: That an insane person held as stated in an application for a second or succeeding writ of *habeas corpus* should say whether any prior application has been made for such a writ, and if such writ had been issued, and that the subsequent or further application for a writ of *habeas corpus* or of *certiorari* should be accompanied by a certificate under oath by two qualified medical examiners in lunacy stating that the examiners have made an examination of the person and of the official records at the hospital of his case and that in their opinion the person in custody has recovered his sanity. Neither bill was introduced into the Senate.

A measure providing for the retirement of medical officers and employees of the New York State hospitals for the insane was introduced in both houses and passed. This measure provided for the creation of a retirement fund obtained by retaining from the wages or salaries of a certain percentage in each case according to the size of the compensation paid; for the retirement at a certain

age of employees or officers; for the retirement of certain employees or officers when physically or mentally disabled; for the creation of a retirement board, to consist of the Comptroller of the State of New York, the President of the State Commission in Lunacy and the medical inspector under the Commission; and for appointment by this retirement board of one or more boards of medical examiners as might become necessary. This measure was brought to the attention of the superintendents at a conference with the Commission and was received with unanimous approval. Later after enlargement and extension of the scheme and the drafting of a new bill the matter was again presented, after an interval of three months, and no objections were made and all discussion was favorable. Learning, however, that a majority of the employees and a very large proportion of the medical officers were opposed to this bill, the Commission requested the Governor not to sign it, and it was included by the Governor in his omnibus veto.

A bill introduced by Assemblyman Hoey provided for possible vacations for *per diem* employees, and provided full pay for them during such vacations as are specially allowed by the head of the department in which they are employed. This bill was signed by the Governor.

Another bill provided for reduction in railroad rates for visitors to State hospitals for the insane, and was introduced by Assemblyman Kopp. A preferential rate has been ruled by the Public Service Commission to be contrary to law. The bill passed and was vetoed by the Executive.

EXPRESSION OF MEDICAL OPINION REGARDING AN ALLEGED INSANE PERSON *

As alleged in open court, and as stated in the public newspapers, Dr. Flavius Packer and Dr. Sidney D. Wilgus (both of whom have been for many years in the State hospital service), at the request of Elmer E. Warner, of Brooklyn, examined his wife, Ellen E. K. Warner, an alleged insane person, with a view to securing her commitment if found insane, to the Middletown State Homeopathic Hospital, as was desired by her husband and rela-

*From *State Hospitals Bulletin*, August, 1910.

tives. Dr. Packer and Dr. Wilgus are licensed practitioners of medicine in New York State, and duly qualified examiners in lunacy. They were properly called by Mr. Warner to perform the medical duty to which allusion has been made, and performed this duty conscientiously and properly when they "with care and diligence personally observed and examined" Mrs. Ellen E. K. Warner on July 13, 1904, then residing or being at New City, Rockland county, N. Y. The preliminary part of the document was completed, consisting of the petition signed and sworn to by Mr. Warner and the joint certificate of lunacy subscribed and sworn to by Dr. Packer and Dr. Wilgus before a notary public of New York county; and it was then presented to the Honorable William J. Gaynor, a judge of the Supreme Court in the county of Kings, in which the patient resided. Judge Gaynor signed a waiver of personal service of the notice of the application for the commitment of Mrs. Warner, and also signed an order committing her to the Middletown State Homeopathic Hospital on July 14, 1904. Mrs. Warner was brought from Congers, N. Y., by a nurse sent from Middletown State Hospital for this purpose, and was admitted upon the commitment noted on July 14, 1904. On December 12, 1904, she was, by order of the superintendent of Middletown State Hospital, discharged as "improved."

In September, 1905, Mrs. Ellen E. Warner commenced an action in the Supreme Court in Brooklyn, alleging that Dr. Packer and Dr. Wilgus had made a "false, pretended and grossly negligent examination as to her mental condition," and that on July 14, 1904, they had completed a certificate wherein she was declared insane, and that on such certificate she was committed as an insane person by Justice Gaynor to the Middletown State Hospital, and alleged damages in the sum of \$50,000, and demanded a judgment for that amount. The action was brought before the court, and in October, 1907, a jury at New City, Rockland county, gave a verdict in favor of Mrs. Warner for \$25,000.

An appeal from this judgment was taken to the Appellate Division of the Supreme Court, and on June 17, 1910, that court handed down its opinion written by Justice Almet F. Jenks, and concurred in by Justices Burr, Thomas, Rich and Carr, being all the justices of the court, reversing the judgment of the Trial

Court, and ordering a new trial. The opinion contains a complete review of the evidence, and as it is of peculiar value to the medical profession, it is quoted entire. The amended complaint of the plaintiff, Mrs. Ellen E. Warner, is also quoted entire, together with the answer thereto by the defendants.

The verdict reached by the Trial Court was amazing to all members of the medical profession to whose knowledge it has come. Had such a verdict been allowed to stand no physician would have the right to the expression of medical opinion concerning any case, should his opinion be adverse to the ideas of the patient. The questions involved in this case are of vital importance to the members of the medical profession, especially to those who make a specialty of diseases affecting the mind. While a physician may err in his judgment and while he may make a mistaken diagnosis, if the judgment of the lower court in this case had been allowed to stand, there would be no possibility of freely expressing a medical opinion without being charged by some one with negligence or pretense.

ALBERT WARREN FERRIS.

SUPREME COURT — ROCKLAND COUNTY.

ELLEN E. WARNER,	<i>Plaintiff,</i>
<i>against</i>	
FLAVIUS PACKER and SIDNEY D. WILGUS,	<i>Defendants.</i>

The plaintiff herein, by Franklin Grier, her attorney, for her amended complaint, complains of the above-named defendants and alleges as follows:

First. Upon information and belief, that all the times hereinafter mentioned, both of the defendants were and are graduates of an incorporated medical college and have practiced as physicians for several years last past, and claimed and represented themselves to be qualified examiners in lunacy, according to the provisions of chapter 545 of the Laws of 1896, and the acts amendatory thereof.

Second. (That prior to July 13, 1904, the plaintiff's husband, Elmer E. Warner, since deceased, by means of false and fraudulent representations had defrauded plaintiff of large and valuable

tracts or parcels of real estate situated in Rockland and Kings counties, New York, and designed to procure the confinement of the plaintiff in an insane asylum for the purpose of preventing the plaintiff's recovery of said real estate).

Third. That on the said 13th day of July, the plaintiff's said husband hired and procured the defendants to make an examination of plaintiff as to her mental condition, and said defendants did make, at the plaintiff's residence in the town of Clarkstown, Rockland county, New York, a false, pretended and grossly negligent examination of the plaintiff as to her mental condition, and on the 14th day of July, 1904, made and executed and duly acknowledged their certificate in writing, dated that day, wherein and whereby they certified that the plaintiff was insane and needed to be placed under immediate restraint. That defendants were paid for their services by plaintiff's said husband.

Fourth. That on the said 14th day of July, a proceeding for the commitment of plaintiff to a State hospital for the insane was instituted by plaintiff's said husband (without notice to the plaintiff), in the Supreme Court, held in and for the county of Kings, based upon the said certificate signed and executed by the defendants as aforesaid, and a (false and fraudulent) petition made and executed by plaintiff's said husband. That such proceedings were had upon said certificate and petition, that on the said 14th day of July, the plaintiff was committed as an insane person, by order of Hon. William J. Gaynor, one of the justices of said court, to the State Hospital for the Insane at Middletown, New York.

Fifth. That, on the said 14th day of July the plaintiff was arrested and conveyed against her will to the said institution where she was placed in the general or common ward of said hospital, and compelled to associate with insane persons, and was imprisoned and restrained of her liberty and privacy. That plaintiff remained confined in said hospital against her will, until the 27th day of October, 1904, and was then paroled and kept on parole against her will until the 12th day of December, 1904, when she was finally discharged. That on the 19th day of January, 1906, an order of the Supreme Court in and for the county of Kings was entered, vacating the said order of commitment to said institution.

Sixth. That plaintiff was not insane at the time of said pretended examinations and commitment, nor has she ever been insane, either before or since those dates. That the defendants wilfully failed and neglected to use or exercise reasonable and ordinary care, skill and diligence to ascertain plaintiff's true mental condition, and wilfully failed and neglected to make a careful and prudent inquiry and proof into the fact whether plaintiff was sane or insane, and failed to exercise their best judgment as to her

sanity, but with gross and culpable negligence based their opinions upon false and interested statements made to them by plaintiff's said husband.

Seventh. That by reason of such confinement and imprisonment, plaintiff suffered the keenest mental anguish and distress and her general reputation as a sane and peaceful citizen was greatly injured. That plaintiff was at the time of the injuries complained of, and had been, for several years prior thereto, by profession a writer of educational text books and had come to be recognized as an authority on educational matters. That at the time said pretended examination was made, and at the date said verified certificate was made and issued, and of her said commitment to said hospital, plaintiff was professionally engaged in the writing and preparation for publication of a valuable series of books, the publication of which had been undertaken by D. Appleton & Company, publishers, and such publication was actually in progress. That by reason of her said confinement and imprisonment as aforesaid, plaintiff was unable to continue the preparation of material for said books, and such publication ceased. That upon her release, the said publishers refused to continue the publication of plaintiff's books because of having engaged in other work and because plaintiff, by reason of said commitment, had come to be generally reputed to be an insane person and her reputation as an authority on educational matters had been greatly lessened and impaired, all to plaintiff's damage in the sum of fifty thousand (\$50,000) dollars.

Wherefore plaintiff demands judgment against the defendants and each of them in the sum of fifty thousand (\$50,000) dollars, together with the costs of this action.

(Note.—All of the matter in paragraph 2 and in parentheses of paragraph 4 of the complaint was stricken therefrom by consent of the attorneys.)

SUPREME COURT — ROCKLAND COUNTY.

ELLEN E. WARNER,

Plaintiff,

against

FLAVIUS PACKER and SIDNEY D. WILGUS,

Defendants.

The defendants, Flavius Packer and Sidney D. Wilgus by Austin & McLanahan, their attorneys, answer the amended complaint herein as follows:

1. Admits the allegations in the first paragraph of said amended complaint.

2. Admits the allegations contained in paragraph third of said amended complaint except that they deny the allegation that the examination therein set forth was false, pretended and grossly negligent, and on the contrary allege that the examination was a thorough and competent one and conducted with the requisite professional skill and ability.

3. On information and belief, admits the allegations contained in paragraph fourth of the amended complaint.

4. On information and belief admits that the plaintiff was committed to the State Hospital for the Insane at Middletown under order signed by the Honorable William J. Gaynor on July 14, 1904, and that she was discharged therefrom on December 12, 1904. These defendants deny that they have any knowledge or information sufficient to form a belief as to the remaining allegations in said paragraph.

5. They deny the allegations contained in paragraph sixth of the amended complaint.

6. They deny that they have any knowledge or information sufficient to form a belief as to the allegations contained in paragraph seventh of the amended complaint.

Wherefore, these defendants demand that the amended complaint be dismissed, together with the costs of this action.

SUPREME COURT, APPELLATE DIVISION — SECOND
JUDICIAL DEPARTMENT.

JENKS, BURR, THOMAS, RICH and CARR, *J. J.*

ELLEN E. WARNER,	<i>Respondent,</i>
<i>against</i>	
FLAVIUS PACKER and SIDNEY D. WILGUS,	
<i>Appellant.</i>	

Appeal by the defendants from a judgment of the Supreme Court, entered in the office of the clerk of the county of Rockland on the 24th day of October, 1907, in favor of the plaintiff, and from an order entered in said clerk's office on the 6th day of November, 1907, denying a motion for a new trial.

JAMES TAYLOR LEWIS, for the appellants.
STILLMAN F. KNEELAND, for the respondent.

JENKS, *J.:*

The action is for negligence. The plaintiff has been confined for a time in an insane asylum upon her husband's petition, to

which was annexed a certificate of the defendants as examiners in lunacy that she was insane and was a proper subject for custody and treatment in some institution for the insane as an insane person. She complains that the defendants made a false, pretended and grossly negligent examination of her as to her mental condition, that she was not insane then or at any time, that the defendants wilfully failed and neglected to use or to exercise reasonable and ordinary care, skill and diligence to ascertain her true mental condition or to make a prudent and careful inquiry and proof whether she was sane or insane, and failed to exercise their best judgment as to her sanity but with gross and culpable negligence based their opinions upon false and pretended statements made to them by plaintiff's husband. She gained a verdict for \$25,000, and the defendants appeal from the judgment thereon.

The defendants were feed by the husband to make an examination. Thereupon they impliedly represented that they possessed the reasonable degree of learning and skill ordinarily possessed by the average examiners in lunacy, and in the rendition of the services they undertook to use such skill and learning to exert their best judgment in the application thereof and to exercise reasonable care. (*Pike v. Honsinger*, 155 N. Y., 201-210 and cases cited.) The burden was upon the plaintiff to show that the defendants fell short in their qualifications or their obligations. (*Winner v. Lathrop*, 67 Hun, 511; *Georgia Northern Railway Co. v. Ingram*, 144 Ga., 639.) There is no proof that the statements made by the husband were false and pretended. The plaintiff did not advance the proposition that the defendants were not qualified. On the other hand, the evidence shows that they were educated in their profession, alienists who as such had filled important public positions, and were of large experience gained from thousands of examinations. We therefore need not consider this ground of liability. The question on this appeal is whether the plaintiff made proof to justify the verdict of negligence in (to quote the plaintiff's charge) "the ascertainment of plaintiff's true mental condition." The plaintiff's cause consists largely of testimony of lay witnesses, her acquaintances and friends, that in their opinions specified words and acts of the plaintiff were rational. The plaintiff contended that at all times she was sane. Such contention, so far as it related to the time of her examination, was essential, inasmuch as she could not have been harmed by a certificate of the truth (*Pennell v. Cummings*, 75 Me. 163) unless her insanity did not require restraint and treatment. A certificate of her insanity when she was sane could establish error of judgment, but for that the defendants were not liable (*Williams*

v. *LeBar*, 141 Penn. St., 149; *Pike v. Honsinger*, *supra*). And it could be considered as evidence bearing upon the defendants' qualifications or indicating failure to fulfill their obligations as to skill, learning, care and best judgment in the case. But no presumption of negligence in the defendants arose solely upon the establishment of her sanity at the time of her examination by the defendants (*Williams v. LeBar*, *supra*).

The defendants testified in detail as to their professional conduct. The testimony of the plaintiff was contradictory, but not contrary to that of the defendants. She testified that an examination was made, but her version varies radically from the versions of the defendants, and upon the rebuttal she contradicted certain features thereof described by the defendants. Her contradictions were directed to many of her statements testified by the defendants which to the lay mind would indicate her abnormal mental condition. As the question of veracity was for the jury, the plaintiff, when we consider the correctness of the verdict, is entitled to have her version accepted by us rather than that of the defendants. She testified upon her direct examination that the defendants were introduced to her as nerve specialists, of whom one asked her a few questions and the other did not speak; that they were with her about fifteen minutes; that they asked her one or two questions about her general health and drew from her some facts in relation to her recent experiences with her husband; that they took no notes; that they asked her whether she had ever thought of ending her life, recurring to that question two or three times; and that there was something said about readers which she was making. The reference to the readers is explained by the fact that the plaintiff was the author of several text books used in school.

The version of the defendants, *revised by exclusion of the parts thereof contradicted by the plaintiff on rebuttal*, is as follows: The plaintiff was lying in a sort of lounge chair or steamer chair, covered with blankets. She seemed anxious. She was very pale in appearance when they went in, and then her face flushed, her whole manner changed and she showed intense anger and excitement. After the husband left the room the defendants gave their names and said that her husband had asked them to make an examination, which they would be glad to do if she were willing, but that they did not wish to distress her, whereupon she said it was one of her husband's schemes to annoy her and he would ultimately drive her insane. When asked about her health, she said it was not very good, that there was sufficient cause — her husband — who forced her to work out of doors, and that she had to haul stones. She then rose and showed the paths she had made

outside. She said her husband had deliberately walked across the lawn to annoy her. Dr. Packer asked her again about injuring herself, and she said she would not, that she would not bring disgrace on her family. The husband returned and she acted very angry towards him. She said she had to move her bed because of a leak in the roof. She became very much excited at four separate times during the examination. She would pale and flush and her pupils would dilate and her muscles would contract and she would sit up. Finally she rose hastily from her chair, started across the room and said, "I will show you about my work." She spoke of her works, and she arose very hastily from the chair and went across the room quickly to a little desk she had there, and said she would show them these readers, but she didn't have these readers, but had some descriptive pamphlets in regard to the readers, and they read those, and she had some printed papers in regard to the readers, but she didn't have the readers, it was some printed description of the readers, and she said she was the "Saviour of the English speaking races," and she spoke of the book and said it was the finest that had been written, and during that time she talked very quietly about it, and she said she would send them copies of the books. Then she returned to the chair and she spoke of her work and her accomplishments, and showed them a statement a number of different times. In regard to her physical condition, of course, Mrs. Warner looked fairly well, excepting that she was pale and very anxious, and she looked to be all right excepting during the period of excitement, then she would become excited and speak in a very loud voice. She became excited to the extent that she spoke and shouted in a very loud voice, and she showed great excitement during this time, and then again she would become more composed. As regards her physical condition, it was very fair. They did not make a record of her pulse, but Dr. Packer took her pulse and it was somewhat accelerated. She was anemic when Dr. Packer looked at her, and he thought so, at first, but in looking at her again he found her color was very good; that her pupillary reflexes were all right, and the various reflexes were all right. Dr. Wilgus testified that after he and Dr. Packer came to the plaintiff her husband said: "Nellie, I have brought these two physicians to examine you, because I thought you were sick, they will talk with you, and will see if anything can be done for your good." Mrs. Warner seemed out of patience. She appeared angry and made the remark to Mr. Warner, but made no other objection to their remaining there. Mr. Warner stepped downstairs and left them alone with his wife. Dr. Wilgus permitted Dr. Packer to do most of the questioning, nevertheless following what was said very

closely. Mrs. Warner was asked how she felt ill, and asked to discuss the matter in general. Mrs. Warner said that she had been feeling badly, had been nervous for some time, that she had a great many troubles at home, and that she was very much worried; that Mr. Warner had been making trouble for her for a number of years, and that he was gradually getting worse; that in her opinion, he was anxious to obtain control of her property, and was taking steps to drive her to commit some act which would permit of his obtaining the property should that result; that it was part of the scheme for him to control her property; that these troubles had come on her within the past few years; that he had been annoying her in all sorts of ways, for instance, that on one occasion he entered her room, after having been working out of doors, and removed a shirt in which he had been working out of doors, and threw it on a chair on which one of her dresses were placed, she thought he did this with some malign intention to exasperate her; this had occurred a year or two before, if the witness remembered rightly, and yet she brought that up as one of his supreme insults, as she called them. (The plaintiff on rebuttal did not deny absolutely this testimony as to the shirt. She said that she did not think she spoke of it.) She said they had moved to Dellview after they purchased that property, for the purpose of benefiting her health; that she was very much run down, and that she was unable to control herself a great part of the time; that her husband was trying to drive her to some extreme act by leaving leaky roofs over her head, and by meddling with her clothes and giving her insufficient clothing to wear, and all sorts of things of that kind. The witness thinks that she mentioned that her husband squandered her money. She said something about their buying Dellview with the intention of putting up a house there, and that they had erected the foundations, which were observable, but right after the foundations were erected, that he had contented himself with putting up some chicken coops and making her live in the barn, which was an unfinished building. During the examination Mrs. Warner did speak of her husband squandering her money. When Mr. Warner returned to the room with a pail of water, Mrs. Warner stopped conversing with them when he entered the house, and when she heard his steps on the stairs. He came up the stairs and put the water on a small stand at the head of the stairs. She looked at him in a very angry way and stared him out of countenance and he went down stairs without a word. After he was gone, Mrs. Warner said that at times she was unable to control herself owing to her nervous and rundown condition, and as she talked with them over these family difficulties, she be-

came wrought up. She had little or no control of her emotions. The defendants testified without contradiction that they were strangers to the plaintiff and to her husband until the latter came to retain them, with a letter of introduction to Dr. Packer. Dr. Packer testifies that the plaintiff's husband laid before him in a worried and rather impressive way the conduct and the doings of the plaintiff as follows: "Mr. Warner said he feared he would have to send Mrs. Warner to a sanitarium; that for three or four years she had been acting strangely, and that for two or three years they had a great deal of trouble; that there was nothing he could do to please her, that she attacked him, had threatened him, and had also threatened to injure herself, and he said he did not want to do it. He said she was sick, that the city life disagreed with her, and they finally purchased a place in the country. He said she was nervous and ill, and he took her to the country, and that they bought this country home hoping that she would recuperate. He said she worked out of doors in the hot sun carrying these stones and trundling a barrow and exposed herself, and it injured her health, and that he could not control her in this, and he said, when he went home at night that she would attack him, and that she left notes around the house for him instead of speaking to him, and that those notes were in the form of agreements which he had to sign, and which were utterly ridiculous, but he had to sign them — he said that he had to sign those and he said that they had so much trouble over the expense of the house and the expense of the two, that it was agreed they would divide all the expenses, and that it was extremely humiliating to him, because he had to divide the car fare even, and he spoke of those things as showing her state of mind, and he wanted to know what I thought. He asked me for an opinion. He also said that she would scream and scream until it had disturbed the neighbors, and they had finally had to let their house, or their rooms, or whatever it was; he gave me the facts which are asked for on the fourth page of the certificate, after the article requiring her age, condition and so forth, which is just prior to the affidavit. I did not know Mr. Warner before this day. I next saw Mr. Warner a few days after that. Four or five days after; then he came the second time in regard to the case. I did have a further conversation with him with reference to his wife's case. I had a further conversation with him and got those facts on the fourth page of the certificate at the time of the first visit, it was at the time of the second visit. At the time of the second visit he said he had decided; at the time of the second visit he asked me to examine Mrs. Warner, and we went over many of the facts as enumerated above. After this conversation I proceeded

to New City." Dr. Wilgus testified: "I did have a conversation with Mr. Warner in reference to his wife's case on the occasion of this trip to New City, on July 13, 1904. Mr. Warner said that, he told me on the train that he and Mrs. Warner had known each other for a number of years, and that they had been married for I think, about ten years, I will say that roughly, I don't remember the exact length of time, that they had lived a very happy life, and were apparently congenial until about 1900. Mr. Warner said that they had gotten along very well until about 1900, and between 1900 and this time in 1904, Mrs. Warner had threatened to commit suicide; that she had assaulted him; that she had made him sign very unusual agreements, including much that he considered nonsensical. That she had made him agree to share half the expenses of the house account with her; that she accused him of being a thief, and of having designs on her property and even on her life; that in order to benefit her health they had agreed to purchase that place at Dellview, and that she had gone out there in the attempt to recuperate; that things had progressed no better from the time that she had gone to Dellview, and in fact that his wife had become even more exacting, and that he felt that for her good, something ought to be done for her welfare." Some of the statements of the husband as testified to by Dr. Wilgus are corroborated by the writings of the plaintiff read in evidence.

A striking feature in the plaintiff's case is the omission of any scientific or expert evidence as to the course pursued by the defendants in the examination, as to what was done that the average examiner in lunacy would not have done, or as to what was not done which such an examiner would have done under the circumstances of the case. We know insanity is a mysterious disease, that it may exist without physical indications, is often cunningly concealed so as almost or altogether to baffle detection even by a specialist, or may be so occult as to cause most eminent alienists to clash as to its existence in an instance. The diagnosis of it is recognized as a difficult task. (Balfour Brown, *The Medical Jurisprudence of Insanity*, p. 320; Mann's *Medical Jurisprudence*, p. 113.) Wharton & Stillé on *Medical Jurisprudence* write in section 1240: "In brief, the task of a physician when he examines a patient for certification is to make a diagnosis. If, for any reason, he is not able to make a diagnosis, he should not sign the certificate. The whole art of diagnosis may be involved in the case, and there is no rule for it except to have a reliable knowledge of insanity." It seems to me that the very nature of the subject — the question of negligence in a diagnosis — would almost preclude a jury from passing upon it by their common knowledge

unaided by any scientific or expert information whatever, or by the testimony of any witnesses of special knowledge and skill. Yet there is not in evidence any standard for comparison of the conduct of the defendants with that which was required of them. In *Van Wycklen v. City of Brooklyn* (118 N. Y. at 429) the court per Brown, J., says "While it is no longer a valid objection to the expression of an opinion by a witness, that it is upon the precise question which the jury are to determine (*Transportation Line v. Hope*, 95 U. S. 297; *Bellinger v. N. Y. C. R. R. Co.*, 23 N. Y. 42; *Cornish v. F. B. F. Ins. Co.*, 74 id. 296) evidence of that character is only allowed when, from the nature of the case, the facts cannot be stated or described to the jury in such a manner as to enable them to form an accurate judgment thereon, and no better evidence than such opinions is obtainable. (*Ferguson v. Hubbell*, 97 N. Y. 507; *Schwander v. Birge*, 46 Hun, 66; Greenl. on Ev. vol. I, 440, and note.) Familiar examples of the admission of evidence of this character, are cases involving questions of medical practice and skill, and cases involving genuineness of handwriting." (See, too, *Dougherty v. Milliken*, 163 N. Y. at 533; *Northern Pacific Railroad v. Urlin*, 158 U. S. at 173; Rogers on Expert Testimony, p. 148; Thompson on Negligence, 8848 et seq.; *Link v. Sheldon*, 136 N. Y. 1-10; *Connecticut Mut. Life Ins. Co. v. Lathrop*, 111 U. S. 612.) In *Wood v. Wyeth* (106 App. Div. 21) this court, per Bartlett, J., indicated the importance of such testimony as is lacking in this case, and said: "I have been unable to find enough in the proof offered by the plaintiff to justify a finding that there was any lack of professional intelligence, skill or care on the part of the respondent, either in deciding to perform the operation, or in its performance, including the administration of the chloroform. The plaintiff sought to establish such negligence by the testimony of a medical expert, Dr. Henry Enton, of Brooklyn, but neither in answer to hypothetical questions, nor in any other part of his testimony, does he really express the opinion that what is shown to have been done by Dr. Wyeth was contrary to the best or established practice of qualified surgeons in the treatment of such a case under similar circumstances." Nor do I think that any negligence can be imputed in this case to the omission to make further inquiries, although it is recognized in a leading English case (*Hall v. Semple*, I. F. & F., 337) that such obligation may exist. The husband's narrative was of the relations between him and his wife — this plaintiff — of her conduct and her bearing towards him. Husband and wife appeared as living under the same roof, and there is no indication that there was anyone whom the defendants could have consulted in corroboration of the husband, save, of course,

the wife. Upon consideration of the case in the light most favorable to the plaintiff, as is her due, I fail to find sufficient evidence to support the verdict. As I have said, I have not considered the full versions of the defendants of their examination. And I have not considered the testimony of two eminent physicians, specialists in insanity, called by the defendants (whose testimony upholds the defendants), for the reason that the hypothetical questions addressed to these witnesses embodied features which, though testified to by the defendants, were contradicted by the plaintiff. I should notice one bit of testimony of the defendants, which though contradicted by the testimony of the plaintiff, nevertheless has the corroboration of probability, found in her writings. Dr. Packer testified that in the course of her examination the plaintiff spoke about a brook near the house, "that the brook babbled on, that it did not see the loveliness of the trees and rocks and that it would drown her as quickly as it would a rat and that the name of this brook was Elmer Warner" (her husband). Dr. Wilgus testified that the patient said that she had become so nervous that she thought of suicide and "had even gone to the brook, with the deliberate intention of doing away with her life, but when she heard the rippling of the water over the stones, it brought up a soothing turn of thought which restrained her from committing the act; as she looked at the little brook that ran over the ground, and as it undermined the shrubbery and trees on the banks, and yet rolled on pleasantly, that it reminded her of the acts of Elmer Warner, who would like to drown out her life as the brook would." The plaintiff in rebuttal testified: "The brook was not mentioned." This examination took place on July 13, 1904. Defendants' Exhibit D, written by the plaintiff, is as follows. "July 13, 1904. I got another interpretation of the brook yesterday when I went to it for solace and rest. I fear it will never soothe me again as it has done. I found myself saying to it 'You are insensate, following your own bent, your own idle pleasure, your own aims regardless of what good or ill you do. You have no feeling for the arched beauty of rock and forest that bends protectingly above you. You would undermine it and find your way through its ruins or about them and laugh on as unconcernedly as ever. You would drown out the wonderful life of a human being in any of your pools as willingly as you would a rat, and then ripple on, whispering with your fairy voices as if you had sweet secrets to tell. You are the highest of all types of smiling, wooing ruthlessness. Your name is Ellsworth Warner.' Dear Auntie: This is sent you though not written for you on the eve of my departure in a closed carriage, for parts unknown. Yours affectionately, Nellie."

There is ground for surmise that the jury found negligence from the premise that the plaintiff was sane at the time the defendants certified that she was insane, for the minutes show that they "returned their verdict in which they find that Mrs. Warner was, on the 13th day of July, sane and rational, and finds doctors guilty of negligence and fix the damages at \$25,000." The findings of sanity was no more a part of their formal verdict than would be a finding in a verdict for the plaintiff in a negligence case that the plaintiff was not chargeable with contributory negligence.

I advise that the judgment and order be reversed and that a new trial be granted, costs to abide the event.

INCREASE IN RATE CHARGED FOR REIMBURSING PATIENTS

For many years past the unusual and continued upward tendency in the price of staple articles of supplies used by the State hospitals has made the rate fixed by the Commission in 1899 for the maintenance of patients belonging to the so-called reimbursing class, *i. e.*, those whose means permitted them to pay the bare cost of maintenance, obviously inadequate. When the rate was fixed in 1899 no account was taken of the cost of deterioration of buildings, the Commission regarding the weekly-payment of \$3.50 as sufficient and one which could in very few cases be regarded as oppressive. With the enormous increase in numbers, however, it was seen that some action was necessary to lessen the deficiency which annually accrued in maintenance account. From this source there is usually received each year \$275,000, and this amount is received from but 8 per cent. of all patients under treatment. After thoroughly canvassing the subject the Commission promulgated an order on the 1st day of August increasing the rate to \$5 per week. Some protests against the higher rate were received from the relatives and friends of patients belonging to this class. Through the co-operation of the hospital attorneys and the Commission's agents it has been possible to investigate each of the cases in which application was made for a restoration of the previously existing rate; and whenever the Commission has found the circumstances to justify it a partial rate has been established. The Commission looks forward with confidence to a considerable increase during the coming and succeeding year in the income from this source.

JOINT CONTRACTS

No additions have been made to the list of items to be purchased under joint contract for the State hospitals during the fiscal year. Tests have been made by experts on flour, molasses, syrup and cotton goods, and minor items have been analyzed at the request of different institutions.

The grade of butter has been changed by direction of the Commission from "Creamery Extras" to "Firsts."

The grade of eggs has been changed from "Storage Packed Firsts" to "Storage Packed Firsts April Stock," to insure a uniform grade of specific "lay." The practice of the trade in storing eggs laid during that period is to mark same "April laid eggs." The subject of the complication arising from the egg contract is treated in a special report which will be presented to the Legislature immediately upon its organization.

Owing to the prevailing high prices the quantities of ham, shoulders and bacon were reduced 50 per cent.; also the item of apricots was eliminated temporarily for the same reason. In each case substitutions were made.

The practice of contracting for mixed paints was discontinued and the purchase of white lead and ingredients was substituted by direction of the Commission, owing to general complaints on the part of hospital authorities.

THE CONTRACT FOR MILK FOR METROPOLITAN HOSPITALS

In June, 1909, following his usual procedure, Purchasing Steward Wheeler issued requests for proposals for condensed and raw milk for the Manhattan, Long Island, Kings Park and Central Islip State Hospitals, the contract to run for one year, beginning July 1, 1909. It was specified that the condensed milk should contain not less than 12 per cent butter fat, with other constituents in their natural proportion.

The purchasing steward received four bids in competition under the specifications. In addition to these bids the White Cross Milk Company offered to supply milk to contain a higher percentage than 12 per cent., describing their product as follows:

"Our concentrated White Cross Milk contains 16% of butter fat, and will on dilution with three parts of water show 4% of butter fat, and the proper proportion of non-fatty solids for non-

mal milk,—consequently we call your attention to the fact that our White Cross Milk is subject to a dilution of one part more of water than the condensed milk of other bidders, or a bid of .18 per quart for ordinary condensed milk is the same as .24 per quart of White Cross Milk.”

* * * * *

“White Cross Milk can be used either as concentrated milk (or condensed), or with three parts of water added, it is the same as normal milk with the advantage which we guarantee, of being entirely free from Tuberculosis Bacilli, Typhoid Fever Bacilli, and all pathogenic germs, and free from all stable dirt and odors.”

As the bids and the proposal were not submitted upon the same basis, the four bids offering milk containing 12 per cent. butter fat, and the proposal offering to furnish milk with 16 per cent. butter fat, were all rejected, and after conference at the Manhattan State Hospital between the purchasing steward and the commissioners, the purchasing steward was authorized to arrange with the White Cross Milk Company to furnish milk at the price named in their proposal for an experimental period of three months, beginning July 1, 1909, such authorization being made on the supposition that the milk containing 4 per cent. butter fat produced by diluting the White Cross milk would be cheaper than 4 per cent. milk similarly produced from the condensed milk furnished by the lowest of their competitors.

The White Cross milk was prepared under a new process, and seemed to offer other advantages which would justify at least a period of trial. After the first experimental period a conditional contract for a further time was entered into but with the right to the Commission to terminate at any time.

The reports of the hospitals regarding the White Cross milk were variable. Mr. Henry C. Wright who, at the instance of the State Charities' Aid Association, made an extensive independent investigation into the quality and value of food supplies, reported that it would have been more economical to buy of the lowest of the other four competitors as the White Cross Milk Company was not the lowest bidder.

Some differences of opinion developed between the various experts on different points at issue. In view of the complication

surrounding the situation, it was finally decided to terminate the conditional contract, and new bids for a full year's supply were requested of dealers in and about New York city including the White Cross Milk Company.

The lowest of the bids received was that of the Beakes Dairy Company, with whom a contract was made on May 19, 1910, for condensed milk containing 12 per cent of butter fat.

The Commission has directed that milk falling below the specifications in the contract shall not be accepted as filling its terms. The Commission will endeavor to secure the co-operation of the State Department of Agriculture in making analyses and in specifications in case it is determined to make any further general contracts for milk.

MODERN BUSINESS METHODS DESIRABLE

The Commission has felt for some time that an investigation of the methods of keeping the accounts in the different hospitals, the system of checking and counter-checking receipts of articles purchased and delivered on requisitions, as well as the system of accounting in the office of the Commission, should be made by experts thoroughly competent to pass upon the merits or demerits of existing systems, and to make recommendations which would improve or simplify methods, and, if possible, reduce the cost of keeping the accounts.

On July 19th the following resolution was adopted:

“VOTED: That arrangements be made with the Audit Company of New York city to examine into the present system of State hospital bookkeeping and financial records with a view to improving and simplifying the existing system of records and accounts and as to the present condition of all accounts.” *

CO-OPERATION WITH THE DEPARTMENT OF AGRICULTURE.

In the list of legislation for 1910 reference has been made to a bill which was signed by the Governor providing for the examina-

* Work under this resolution was begun in the office of the Commission at Albany on November 7th and at Manhattan State Hospital on November 14th. On November 19th a theft of meat at the Manhattan State Hospital was discovered by the Hon. R. B. Fosdick, commissioner of accounts of the city of New York, and as a result the scope of the examination was materially broadened. Reference to the work of the Audit Company will be found in the special report submitted to the Legislature on the 3rd day of January, 1911, by the Commission in Lunacy.

tion by the staff of the Commissioner of Agriculture of food products submitted by the State Commission in Lunacy and for reports embodying the results of such examination. Commissioner of Agriculture Pearson has cheerfully and with ever-ready helpfulness undertaken repeated examinations of certain foods purchased by the State hospitals and his work is of the greatest value to this Department.

In January, 1910, the Medical Commissioner in Lunacy requested Commissioner Pearson to take up a thorough study of the farms attached to the various State hospitals, with a view to suggesting proper fertilizers after having made a study of the various soils, and also proper rotation of crops and proper utilization of land now partially productive or entirely unproductive. The request was also made that he examine particularly into the matter of our herds and their milk-producing quality and make suggestions as to proper food, breeding and such efficient handling as may result in the raising for the hospital patients of all the milk that they consume, if this be possible.

A complete description of each farm was placed in the hands of Commissioner Pearson and a statement of every variety of farm product in each case, the yield and the amount of seed being stated in detail, and the value of the crops as estimated for our annual report. The Commissioner has taken up this extensive work with great interest, and the Commission confidently hopes he will suggest methods by which a larger productivity and crops of much larger value will result, and that he will recommend to the Commission some one qualified by graduation from an agricultural college as a theoretical farmer, who has also had wide practical experience, who may be attached to our Department as a consulting agriculturist to advise constantly with the various individual farmers at the State hospitals.

EFFICIENCY REPORTS CONCERNING MEDICAL OFFICERS

In May, 1910, the Commission in Lunacy promulgated a regulation providing that thereafter on or before the 15th day of July and of January in each year each superintendent should report to the Commission upon the conduct and services of each of the medical officers of his staff, upon blanks furnished by the Commission.

The report of the superintendent is to be in the nature of a confidential communication, to be used by the Commission in judging of the relative merit and efficiency, also the character and ability of each medical officer from time to time, especially when such officer is a candidate for promotion in the service.

These reports are based somewhat upon the system prevailing for many years in the United States Army. The Commission feels that length of service and seniority alone should not be the personal basis upon which, together with the results obtained from an examination, is laid the ground for advancement in rank.

The report includes statements upon the following topics: Number of patients on service; class of patients; average daily number of patients; number of deaths; percentage of autopsies obtained; number of wards; number of patients on the service; name of physician in charge of the service; number of employees; and administrative work in addition to ward service. Concerning clinical and scientific work the following data are obtained: Number of new admissions examined by the physician; number of cases presented or reported at staff conferences by him; special clinical work assigned to him; number of autopsies attended by him; laboratory work performed by him; and special studies or investigations in which he has been engaged. A report on intellectual activity is requested, a statement being asked concerning the papers read or published; the meetings of medical societies attended; and the inter-hospital conferences attended. Character and ability shown by the physician during the period included in the report are to be stated according to the superintendent's analysis as regards the physician's executive, clinical and general activity. A statement is desired concerning his habits and other personal matters, the state of his health during the period, and the number of days absent from duty. The superintendent is directed to certify upon honor that to the best of his knowledge the entries made in the efficiency report are true and impartial.

VACATION CAMPS AND COTTAGES

The vacation camp at Lake Farm near Rochester State Hospital was continued with success during the past year, a large number of patients being taken by means of the motor truck out to the farm for a period of one or two weeks in each case. The completion of

the new barn and the increase of stock at this point furnished increased opportunities for employment of patients in congenial pursuits and additions to the features of interest. To patients taken to Lake Farm is given parole so that they are comparatively free to go and come as they please, to enjoy driving, strolling along the country roads, fishing from the dock on the lake, gathering vegetables and fruits, and collecting wild flowers and leaves in the fields and groves.

The vacation camp two miles from Binghamton State Hospital, on the Susquehanna river, was maintained as previously, and its facilities were much enlarged through the erection of a permanent building to be used in case of storm or cold weather as a place for general congregating and also of increased provision for the erection of tents. The same freedom is given to patients in the vacation camp at Binghamton as at the Lake Farm at Rochester. Many patients who would otherwise have remained stationary and who possibly would not have recovered at all receive a new impetus toward recovery, show immediate improvement, and in many cases return to their friends on discharge from the hospital.

The vacation cottage at Wilson, on Lake Ontario near Buffalo, was leased for another year and maintained for a purpose similar to that of the camps mentioned during the past twelve months. The occupations and pleasures of the patients are largely the same as at Lake Farm, with the additional advantage of the close proximity of a village, where the patients can make small purchases in the shops, can attend church, and through the hospitality of the residents can make calls upon the people residing in the neighborhood. During one calendar year Dr. Hurd, superintendent of Buffalo State Hospital, reported that forty-two patients of the total number who had enjoyed the privileges of the Wilson vacation cottage had been discharged improved or recovered, who in all probability would have made little headway had it not been for the encouraging and helpful influences of the cottage life with its comparative freedom and its large country advantages.

NEW SALARY SCHEDULE FOR MEDICAL OFFICERS

The Commission in Lunacy has advocated since February 4, 1909, a new salary schedule for medical officers, which provided for a change of title whereby the present second assistant physi-

cian would be senior assistant physician, and providing also for an increase to \$1,000 of the initial salary of any medical interne who who had one year's previous general hospital medical experience; an increase in the salary of junior physician to \$1,200; in that of assistant physician to \$1,600; in that of woman physician to \$1,300; in that of senior assistant to \$1,900; and in that of first assistant physician to \$2,250. After five, ten, fifteen and twenty years of service respectively the salaries of the assistant physician and all higher grades up to and not including the superintendent under this schedule would be increased a certain proportion upon the initial salary, except that after five years' service the woman physician receives no increase. The salary of director of clinical psychiatry (a position that exists only at Manhattan State Hospital) was scheduled in the new suggested scheme to be increased from \$2,500 to \$3,000 during twenty years' service, a ten per cent. increase occurring at the end of each five years. This salary schedule, after being thoroughly considered and compared with the higher rates paid in the Army, Navy and Marine Hospital services, was approved by the Secretary of State and the State Comptroller, but did not receive the approval of the Executive, without whose co-operation it could not be put into effect by the Commission. The larger advantages and larger salaries offered by many positions outside of the New York State hospital service have attracted many of our good men who have left us, and have been responsible for the large number of vacancies in our medical service which continually exists. The Commission earnestly hopes that during the coming year the adoption of this salary schedule will be made operative through the concurrence of the three State officials named.

STATE HOSPITALS BULLETIN

The *State Hospitals Bulletin* was published four times a year at irregular intervals during the past fiscal period. This periodical preserves the records of the inter-hospitals conferences held, in general, every two or three months during the year; the transactions of the conferences of superintendents with the Commission; the transactions of the Ward's Island Psychiatric Society; certain papers and addresses written by physicians connected with the State service; eligible lists of promotion certified by the State

Civil Service Commission; items of interest and importance occurring during the year, including changes in the personnel of the medical staffs; notes of important *habeas corpus* cases; new hospital features, including construction, administration, therapeutic occupation, etc.; notable occurrences such as injuries, rescues and special capability; and a bibliography of the physicians in the service.

The subscription price remains at \$2 per year, payable to the Utica State Hospital, where the *Bulletin* is printed and from which it is distributed. The Medical Commissioner continues to be the editor of the *Bulletin*, and to him MSS. should be sent.

CHANGE IN PERSONNEL OF COMMISSION

Hon. William L. Parkhurst, who was first appointed Commissioner by Governor Black in 1897, was succeeded in February, 1910, by William Cary Sanger of Sangerfield, who took office on the 18th of February. Commissioner Parkhurst rendered excellent service for the State by improving the system of farm administration and accounting which resulted in a marked reduction of the per capita cost of maintenance. His abilities in this direction were recognized by his reappointment to a second term which expired in 1909. He was retained in office an additional year by Governor Hughes, making a tenure of thirteen years continuous service, the longest thus far recorded by any Commissioner.

QUARTERLY CONFERENCES OF SUPERINTENDENTS WITH THE COMMISSION

Quarterly conferences were held during the last fiscal year of superintendents and representatives from the various boards of managers with the Lunacy Commission. At the conference held in Albany in November, 1909, proposed legislation regarding pensions for nurses and employees was discussed, following a paper on the topic read by Superintendent William Mabon of Manhattan State Hospital. Besides reports from other committees an important report was made by Superintendent Howard of the Rochester State Hospital, chairman of the committee on uniform course of instruction for nurses and attendants. The outline of theoretical work proposed includes lectures on the nature of mental diseases,

ethics and deportment, dangers and precautions, hygiene and measures of treatment, and purposes of each. It also included suggestions as to practical training in wards; hospital housekeeping; attention to toilet, bath and clothing; food service; exercise; occupation; amusements; management of patients; and night duty. The scheme of instruction reported was accepted and adopted by the conference.

At the quarterly conference held in January, 1910, at Albany, a report was made on a retirement fund for officers and employees embodying a bill which was combined by the Commission with a previous bill and formed the piece of legislation to which reference was made on page 55 and which, upon learning that it was distasteful to a majority of those interested, the Commission requested the Governor not to sign. The matter of the need of a law relating to the commitment of inebriates was the topic discussed in a paper presented by Superintendent Hurd of Buffalo State Hospital, and a very illuminating discussion was opened by Mr. Bailey B. Burritt, assistant secretary of the State Charities' Aid Association of New York city. The training school committee submitted an outline of theoretical training of nurses embodying all the topics to be taken up during the two years of instruction and to be used in connection with the outline of practical training reported at the last conference.

A quarterly conference was held in April, 1910, at Hotel Manhattan, New York city, at which a paper on "The Problem of Immigration" was read by Dr. Sidney G. Wilgus, the retiring chairman of the board of alienists under the Lunacy Commission, which has charge of such inspection as is possible of the stream of immigrants and the deportation to other States and other countries of alien insane. The discussion was closed by a paper read by Dr. Thomas W. Salmon, assistant surgeon in the Marine Hospital service, Boston, Mass., for many years United States examiner at Ellis Island, New York city. A presentation of certain gifts was made to Prof. Adolf Meyer, M. D., who retired from the position of director of the Psychiatric Institute after six years' occupancy of that position, and to whom in the largest measure is due the present system of medical work and the unique system of medical instruction which now prevails throughout the service, of which the Psychiatric Institute on Ward's Island is the center.

A quarterly conference was held in July, 1910, at Albany, N. Y., at which the subject of "Fire Protection in Hospitals for the Insane" was presented in a paper by Superintendent Smith of Central Islip State Hospital. A report was made on legislation for 1910 by the Medical Commissioner. Resolutions upon the death of Superintendent Oliver M. Dewing of Long Island State Hospital were adopted. A statement was made by Commissioner Sanger concerning the use of Red Cross emblems by the nurses of the State hospital system, and the recommendation was made that either it be abandoned by them or that the nurses secure an affiliation with the Red Cross organization and thus insure their title to the use of the emblem.

A full report of all the transactions at the quarterly conferences mentioned may be found in the *State Hospitals Bulletin* beginning with the issue for December, 1909.

MEDICAL LITERARY ACTIVITY DURING THE YEAR

An analysis of the bibliography of the physicians of the State hospital service for the year 1909 yields the following result as to articles published in periodicals, or papers read, or addresses made at medical and other meetings concerning medical and cognate topics:

Utica State Hospital.....	1 article
Willard State Hospital.....	16 articles
Hudson River State Hospital.....	3 articles
Middletown State Hospital.....	5 articles
Buffalo State Hospital.....	6 articles
Binghamton State Hospital.....	8 articles
St. Lawrence State Hospital.....	12 articles
Rochester State Hospital.....	7 articles
Gowanda State Hospital.....	3 articles
Kings Park State Hospital.....	9 articles
Long Island State Hospital.....	10 articles
Manhattan State Hospital.....	6 articles
Central Islip State Hospital.....	5 articles
Matteawan State Hospital.....	2 articles
Psychiatric Institute	33 articles
Medical Inspector	4 articles
Medical Commissioner	11 articles

WATER SUPPLY AT CERTAIN HOSPITALS

One of the features that operated to decide upon the purchase of property at Ogdensburg whereon the St. Lawrence State Hospital stands was the illimitable supply of apparently pure water to be obtained from the St. Lawrence river. For some years the hospital used water from this source, but after an invasion of the hospital by typhoid fever on several occasions, which disease was traced in each instance to the use of the river water, a change was made and from the city of Ogdensburg water was purchased which was drawn from the Oswegatchie river at a cost of \$4,000 per year. While this water is free from contamination with the germs of communicable diseases, it contains large quantities of sawdust, which, with a certain amount of silt that finds its way into the mains, operates to occlude almost entirely the hot-water pipes in the entire system, necessitating their removal and renewal practically every four years. The city of Ogdensburg showing no disposition toward remedying this difficulty, the Commission resolved to secure an appropriation from the Legislature for use in establishing and equipping on the hospital grounds a filtration plant through which the St. Lawrence river might be conducted with safety to the consumer. While this bill was pending in the Legislature word was received from the Ogdensburg board of water commissioners to the effect that that city had finally decided to construct a filtration plant in connection with the Oswegatchie river which would remove the objectionable features and thus make the water fit for our consumption at the hospital. The bill was therefore allowed to die. The filtered water from the city mains is expected to be available within a year.

During the year the Rochester State Hospital was supplied with an increased amount of water amply sufficient for all necessities in case of fire, and furnishing part of the domestic water supply, through the extension of the city mains on South avenue passing the hospital buildings. The principal supply of water for domestic purposes is obtained from wells belonging to the hospital and situated on its own premises.

The Willard State Hospital is using water from Seneca Lake, on the shore of which the hospital is situated, the intake being some distance beyond and a considerable distance up the stream from the outlet of the sewer which empties into the same lake.

This arrangement is certainly questionable, although no epidemics of sickness have ever been traced to the use of the lake water. A small epidemic of typhoid fever occurring during the year was traced to the presence of an employee who came to the hospital daily from the bedside of his son, who contracted typhoid fever in Washington, D. C., and returned to Willard while ill. All the instances of typhoid mentioned existed in the cases of persons directly in contact with the father of the original patient, himself a case of walking typhoid for some time, and patients to whom in turn those associated with the father transmitted the disease. It was not at all prevalent through the hospital, although all parts of the hospital and all the different buildings, of which there are very many, were supplied by the same water from the same intake. A plan for a sewage disposal plant has already been projected for Willard State Hospital, and it is hoped that it will be erected promptly after the funds are obtained at the next session of the Legislature for this purpose. Immediately thereafter an appropriation will be sought for a filtration plant, in order that the water used may be rendered as pure as possible.

MEDICAL SERVICES IN THE HOSPITALS

A study of the medical service in each of the various hospitals, begun last year by the Medical Commissioner, the director of the Psychiatric Institute and the medical inspector, was prosecuted during the last fiscal period. These officers made a study of the Utica, Binghamton, Kings Park and Central Islip State hospitals with a view to making such suggestions to the superintendent as are more apt to occur to the mind of the student who stands outside of the hospital territory, and who views certain matters from a different angle because of his knowledge of the administrative and financial features of the central office, and because of the possession of comparative information and instruction which he gains from a conspectus of the whole system. The necessities at Utica to which its superintendent had drawn the attention of the Medical Commissioner were thoroughly studied, and as a result suggestions were made to the superintendent and to the board of managers which were followed by the appointment of a new second assistant physician who was put in charge of the reception hospital, and

also of a revision of the medical service and a reassignment of the various medical duties.

The study at Binghamton resulted in certain administrative changes and in a revision of some parts of the medical service and a reassignment of duties to certain of the physicians which the superintendent believed and has since found to be successful in securing greater efficiency.

A similar conference at Kings Park State Hospital resulted in a similar revision of the plan of medical care and in the creation by the superintendent of separate departments and the reassignment of many physicians to somewhat different groups of wards and duties. It will be necessary for the Commission to allow additional medical officers at this hospital.

An examination of the medical service of the overcrowded Central Islip State Hospital was made, with the result that definite subdivisions of the acute service were made by the superintendent and additional second assistant physicians were allowed and that vacancies in the medical staff were filled by physicians who were necessarily quartered at the hotel in the town pending the completion of a staff house now in process of erection.

PSYCHOPATHIC WARDS IN GENERAL MEDICAL HOSPITALS

The care of the alleged insane pending commitment demands that there should be some place of refuge for the patient between his home and the State hospital wherein he may be comfortably housed and properly treated until the determination of his case and the transfer to a State hospital or elsewhere. It is a sad commentary upon the humanity of to-day that over five hundred patients are annually brought to the State hospitals from jails or lockups or cells in police stations. In many instances this disposition of the supposed insane patient is contrary to law. In all cases it is of great damage to the sick one, as to be treated as a criminal invariably produces in his mind the belief that he is suspected or accused of a crime of which he knows he is innocent. In many instances insane women have been confined in jails for several days where there were no women to minister to their wants and where they were cared for entirely by male employees. The impropriety and the great danger of this proceeding need only be mentioned. It is imperative, therefore, that general medical hospitals in all

large towns and in several instances in each large city should be equipped with psychopathic wards, or pavilions, in which borderland or undetermined cases may be confined pending a diagnosis and other disposition in their case, and where undeniably insane patients shall be surrounded with hospital facilities and afforded hospital treatment during the interval that elapses between their arrest and their commitment to a licensed private house or to a State hospital. It is urged that physicians and all interested in the care of the unfortunate insane should unite in influencing the early consideration of psychopathic wards in connection with general medical hospitals.

SUGGESTIONS REGARDING POSSIBLE FUTURE POLICY; A SPECIAL REPORT BY THE MEDICAL COMMISSIONER IN LUNACY

The Hon. Edwin A. Merritt, Jr., chairman of the ways and means committee of the Assembly, requested the Medical Commissioner to report to him suggestions regarding the future policy of the Commission in general as well as special matters, and to make, if possible, a prophecy as to the needs of the department and the growing total expenditures anticipated for the next fifteen years.

The medical commissioner feels that it is desirable that such a report be made to the Legislature as well as to the chairman of the ways and means committee, and believes that everyone will realize how difficult, if not impossible, it is to comply with the entire request. The number of insane in years to come will depend largely upon the possibility of instituting such measures of prevention of insanity as may appear possible and practicable from time to time, including control of the liquor habit, limitation of the prevalence of syphilis, limitation of the drug habit, and successful instruction in physical and mental hygiene, in sanitation, in orderly daily life, etc., carried on by this department with the help of the members of the State Charities' Aid Association and other willing philanthropists. A short statement by me regarding the prevention of insanity will be found on pages 96-100 of the Report for 1909-10.

The work of the Commission can never be consecutively or properly completed unless the Commission is provided with proper

quarters in the Capitol building. The Commission receives many callers, who are of necessity shown at once into their only private room. There never has been a reception room for the use of the Commission. Constant interruptions occur from those who should very properly see the Commissioners. There is no place where any work can be done without interruption, and there is no place where quiet can be secured for creative mental work or even for ordinary dictation. The Commission has been informed by the Superintendent of Public Buildings that he is unable to assign any additional space to this Department, in spite of the unhealthy overcrowding, and lack of proper ventilation.

A majority of the Commission in Lunacy feels that its work could be more effectually organized and carried forward if it were under the direction of a single commissioner with deputies to whom definite work might be assigned at different times, the deputies always being at hand to offer such advice to the single commissioner as he is sure to need when difficult problems arise. This organization would prevent needless duplication of work, prevent delay, and insure a division of experience in inspection work.

It is believed that the efficiency of the examiners, forming the so-called "Board of Alienists" under the Commission has been so thorough that the work is now well organized and on such a substantial foundation that the matter of the inspection of immigrants, and the consideration of matters relating to the deportation to their own countries or to their own states of alien insane who do not belong to New York, can be done thoroughly and efficiently by a single physician with the two or three lay deputies at a less cost than now results from the employment of a board of three physicians who accomplish this matter. A slight amendment in the law would provide for such a change and would enable the Commission to put into operation this suggestion, with resulting economy.

The attorneys attached to the various hospitals are very essential factors in the matter of collecting from the relatives who are liable under the law various reimbursing rates charged for the care of some of the insane patients. In certain instances the counsel are engaged during almost their entire time in their work of the State and in other cases the work is very moderate in extent and could

possibly be carried on through deputies in the Attorney-General's office. But it is absolutely essential that if this change were made, such deputies should be civil service officials and permanently assigned to the work of the hospitals. It is desirable that there should be attorneys for the hospitals in the metropolitan district and also in Buffalo, and it is possible that the other hospitals of the State could be under the care of several deputy attorneys-general assigned to cover different districts. *Habeas corpus* cases alone make it essential that there should be many attorneys on the ground and immediately available at all times.

The development of our farms and of our dairy industries is deficient and inadequate. Various hospitals are buying farm products and an enormous quantity of milk that would in almost all cases be produced upon the local hospital farm, if this matter had been properly studied and the problem had been solved in years gone by. The success of alfalfa raising on soil of almost any character re-enforced by proper fertilizer, or the production of clover stimulated by the artificial addition to the soil of the proper bacteria, will result in providing abundant pasturage. The Medical Commissioner secured last January the promise of the Commissioner of Agriculture to co-operate with the Lunacy Commission in the matter of the study of soils, rotation of crops, adaptation of fertilizers and special provision for raising milk; and the Department of Agriculture has begun a complete study of our conditions and needs and has already made valuable suggestions. Modern intensive farming should be the rule on all our hospital farms and the highest type of scientific agriculture thereon should furnish an example to the entire State of the possibilities of our soil. Modern forestry, advocated by me two years ago, should be practiced in our groves and woods.

Vegetables and fruits which can be raised in such quantities as to exceed the local necessities should be transferred to other hospitals where freight charges permit.

It seems perfectly feasible to raise sheep in large quantities on many of the hospital farms, for parts of each tract consist of rough, irregular, rocky land, or groves of young timber, affording forage for sheep while not providing pasture for cattle. Were the hospitals to kill their own lamb and mutton it is probable that

a considerable saving would be effected. The value of the fleece would be considerable and would add to the amount yearly paid into the State treasury by the hospitals under the finance law.

Certain of the hospitals should raise all the horses needed throughout the service. Good horses are becoming progressively higher in price constantly.

New sites for hospitals that will be needed in ten or fifteen years should be selected and purchased while land is cheap near the cities where we confidently expect a large increase of population, including Syracuse and Albany. These new sites could be under the control of our farmers who would, through the sale of the produce raised or through the value of what is transferred to hospitals, show an income that will several times offset the expense of carrying the property until it is needed for building purposes.

There are in the State hospitals a great many cases of constitutional mental inferiority, and these individuals are very liable to episodes of an insane character and are especially liable to the engrafting of absolute insanity upon their present mental condition, owing to their small resistive power and their extreme susceptibility to undermining influences. When such cases have passed the acute condition for which they were sent to the hospital and are in such mental shape as to be able to go out into the world under the watchful eye of some interested person, it is still necessary to hold them in the hospitals, for the reason that there is no one who can undertake their care and provide the watchful eye necessary. One great danger in the cases of these patients is that they are very likely to beget children, and thus subject the State to the danger of an increasing number of mental defectives ultimately to be cared for at public expense. When the matter of caring for feeble-minded persons and cases of constitutional mental inferiority is further advanced in the State, in all probability provision will be made for patients of this class, who will then no longer occupy beds in hospitals needed for the mentally disturbed of all other classes. In our hospitals we are housing a large number of dotards, probably 1,500 in all, who have been brought to us from almshouses and county houses or from homes where they were neglected and improperly treated. These patients present physiological decay that occurs in almost all cases of extreme age,

but in many instances they cannot be properly classed as cases of senile insanity. Yet motives of ordinary humanity and decency actuate us in retaining these patients and caring for them as kindly and considerately as possible, since there is no provision in county houses for their proper treatment. It is difficult to draw the line medically between the dotard and the senile dement, and practically and for purposes of proper care there is little distinction. It is a question for the legislators to decide whether the hospitals for the insane should continue indefinitely to care for dotards or whether the county should be obliged to make suitable provision under close supervision of the State Board of Charities for the considerate treatment of such unfortunate aged people as must be considered as forming this class.

The State is caring for a large number of cases which, in all human probability, are absolutely irrecoverable. These patients are more or less oblivious of their surroundings; all their sensibilities are blunted; their appreciation of cleanliness and refinement and ordinary hospital agencies is very limited; they cannot be occupied in any way, having long since ceased to read or to take more than an elementary childish interest in their environment; and they are oblivious of even the flight of time. These patients could be cared for adequately, could receive sufficient nourishing food, could enjoy all the personal attention of which they are capable of comprehension, and could in all respects be humanely and kindly treated and cared for if they were assembled in one or two large hospitals whose buildings are constructed for the easy supervision of a large number of inmates. The clothing of these people could be of the simplest description; the number of nurses in charge of them could be reduced to a safe minimum; the number of physicians resident in these chronic hospitals could be much fewer in number than those caring for acute or probably recoverable cases; and their food need not present the variety which is essential to encouragement, the awakening of interest in life and the increasing peace of mind which are essential to patients who can appreciate "the pleasures of the table."

There are from time to time cases of protracted insanity that have emerged and become perfectly sane after a psychosis lasting eight or nine years. It is of course wrong so to treat any pro-

tracted cases as to rob them of the possibility of recovery. But it is a fact that in all cases of this nature that have been studied by the Medical Commissioner the patient has emerged from this continued period of insanity long after all active efforts have ceased and all personal treatment directed to him with a view to assisting him to recover has been discontinued. It is quite probable that no cases of protracted insanity that will emerge will be at all jeopardized by being cared for in an assembly of chronic cases such as is suggested for consideration. The Commission is not yet prepared to state that the aggregation of protracted cases is at this time desirable. The suggestion is advanced merely for debate.

The grade of food purchased for the insane in many cases seems higher than the results or the necessities demand. It is only with extreme difficulty and as a result of constant inspection and constant controversy that contractors are obliged to furnish as high a grade of meat, milk, butter, eggs, flour, etc., as is demanded by the contracts made by the Commission for such supplies. Inferior, or less nutritious food, of course, should never be purchased, but the Commission has already in the case of butter contracted for a lower grade than that formerly purchased, as more easily obtainable and as inviting less opportunity for substitution, which is difficult of detection in view of the conflicting reports by different experts and the wide variance in personal judgment of these products. It now contracts for "Firsts" instead of "Extras." It is unfortunate that a State law forbids the purchase of oleomargarine or butterine, for the use of the State hospitals in place of butter. Oleomargarine is frequently served to guests at restaurants without their knowledge and with their complete enjoyment of the product substituted in place of butter. It is wholesome and nutritious and in certain factories, if not in all, it is prepared with as scrupulous regard for cleanliness and hygiene as is ever entertained by butter makers. It can be procured at from fourteen to nineteen cents per pound as against twenty-eight and three-tenths cents per pound, the average price paid for butter throughout the State. Were oleomargarine substituted for butter this department could show a saving in this food staple alone of \$152,222 per year.

A close study of the matter of construction of new buildings and of additions to old buildings has resulted in the conviction in some minds, that the department should erect more of its own structures and save the percentage of profit made by contractors. This suggestion includes the organization of a subdivision under the Commission or of the State devoted to this work. It would be a source of great economy for our department and for other departments if the State should purchase forests of standing timber to be cultivated according to the modern methods of forestry, and should maintain and control its own sawmills and produce its own lumber. There are still in the Southern States large acreages of timber land to be had at reasonable figures, and the enormous profits that have been and are being made by lumber dealers could as well be made by the State, thus reducing the untimely cost of the construction of buildings and escaping from subjection to such prices for lumber as are more or less influenced by the tariff thereon.

It would be to the great advantage of the department if it were allowed to appoint and control its own inspectors of construction, to inform the hospitals and the Commission directly of all features and details as construction progresses, and to act in harmony with the inspectors attached to the State Architect's office, who are, as is well known by everyone, entirely too few in number, the appropriations allowed for this purpose being regrettably small.

The number of industrial buildings connected with the hospitals should be largely increased, and all industries should be taken out of the basements, because of insufficient natural light and ventilation, and because of the danger of fire. This danger has become apparent from concrete examples very recently. Many articles can profitably be manufactured by patients, for whose labor there is no outlay, and the result would be highly beneficial as well as economical. Therapeutic occupations adapted to individual cases, resulting in increasing the power of attention, increasing the capacity for understanding, and intensifying the impression made in the dormant memory-area, will accomplish better results than wheelbarrow brigades and files of men listlessly pushing road rollers, or superficially stirring the surface of the ground with hoes. That is, while out of door life benefits all, and while the

most elementary activities are the only ones suited to certain cases, industrial buildings with competent instructors will do more for the possibly recoverable insane patients than thousand-acre farms alone.

The expenses of the insane are increased through the statutory obligation to purchase of the prisons all articles made by prisoners which can be used by the State hospitals. It is obvious that it is not practicable to fix the prices on the prison-made articles oftener than once a year, and a release can be obtained from the prison department only when it is unable to supply the articles needed and not at every instance in which opportunity is offered in the open market to take advantage of a special reduction, a remnant sale, or a temporary chance for securing a low price. The private buyer can take advantage of a bargain and buy in advance of his needs, and store the commodity. He can even postpone purchase in anticipation of a rumored fall in prices and by closely watching the market buy at the lowest figure. There would be no reason why the hospitals should not be allowed the same latitude and should not be enabled to take advantage of the market in the same way as the private purchaser, except for the statute mentioned. Certain suitings and ready made clothing afford the most frequently recurring examples of these opportunities to economize. In passing it is well to state that by special arrangement with the comptroller of the State purchases of coal in large quantity may be made for a period longer than three months, in order that advantage may be taken of the lowest figure for the year as decided by the coal factors. Parallel opportunity and discretion should be allowed to this department in the matter of all other purchases.

It is a matter of misfortune to the department and to the employees of the hospital that the Legislature in 1904 made the schedule of wages paid to all employees outside of the resident officers a matter of statutory decision. No changes can be made without the permission of the Legislature in the wages paid the employees in the administrative departments, financial departments, nursing services, domestic services, kitchen, bakery, all laundry services, meat cutters, engineers, builders, mechanics, printers or farmers at the Willard State Hospital without the permission of

the Legislature expressed in a special bill passed by both houses and signed by the governor. Money which was obtained during the last session of the Legislature for the increase of wages of supervisors, nurses and attendants by the small amount of ten per centum could not be so used by the Commission because a bill to enable it so to increase the wages failed of enactment. The increase in the cost of living has necessitated increased expenditures by many of our employees and even a slight increase in wages by the Commission is not possible because of the statutory control. The result of this arrangement is that with few exceptions we are unable to attract the best class of people to fill our always numerous vacancies in the many departments. Naturally the work performed by less efficient or less qualified employees is more expensive than if performed by a better class of labor and the State thereby suffers. It seems reasonable that employers should be allowed to fix wages and salaries according to their knowledge of the needs of the situation with close regard to efficiency and economy and not to have this matter arranged for them by others who not living in the atmosphere of the work and not conversant with the needs, the emergencies, and the special adaptation required in different instances and under different conditions decide upon wages and remuneration upon comparatively slender information, albeit with real zeal and after conscientious study. In his message to the Legislature of 1909, Governor Hughes said: "It is not advisable that particular salaries of subordinate employees in State institutions should be fixed directly by the Legislature."

Respectfully submitted,

ALBERT WARREN FERRIS.

DETERMINATION OF THE VALUE OF COAL

The method of purchasing coal merely by weight and by sample regarded valuable from a firing test alone, is not safe and it is hoped that it may soon be abandoned in the State hospitals. A firing test of sample coal is always made to compare with a similar test of competing samples, but the crucial determination rests with the chemist. At our laboratory at Binghamton State Hospital where competition can be obtained and samples are procurable,

the coal is tested, and before awarding a contract a report is obtained by the Commission, on the amount of ash, the amount of moisture, and the British thermal units, besides other features. The coal value can be computed on the basis of thermal units and the ash and moisture more accurately than simply upon a firing test.

VOLUNTARY ADMISSION

To afford as far as possible opportunities for the early relief of borderland cases, New York State, which had for many years authorized licensed private houses to receive voluntary patients, in 1908 amended the Insanity Law and threw open our thirteen civil State hospitals for the reception, without commitment and on their own application, of patients whose minds are not so impaired as to render them incapable of forming a rational judgment or to render them incapable of resisting undue influence. The number of patients who have taken advantage of the opportunity to enter the hospitals on the voluntary basis has not been large, but it is believed it has included many sufferers who otherwise would have sunk into a deeper psychosis and have been in the end more difficult of recovery and would have necessitated the care of the State for a longer period, had they not placed themselves under care early and obtained prompt relief from their progressive illness. The voluntary cases include the following psychoses: Manic-depressive insanity and allied disorders; dementia praecox, and allied disorders; alcoholic psychosis, acute alcoholic hallucination; general paresis; involutional melancholia; paranoic condition; hysterical psychosis; constitutional inferiority; psychasthenic depressions; anxiety psychosis; arterio-sclerosis symptom-complex; and infection exhaustion psychosis.

The close relation between the family and the hospital established by the voluntary admission provision of the law is of great value to the sufferer and to the community. If any argument is needed in favor of early voluntary admission it is found in the fact that while the annual death rate in the State hospitals for the insane is 8 per cent of their population, 40 per cent of all the deaths occur during the first year after admission, and 15.6 per cent of the new cases die during their first year of residence in the hospitals. Immediate and energetic action, therefore, is necessary, very early. In fact, the treatment of a case of mental

disorder should begin long before the time at which it is possible to allege sufficient mental irregularity to render warrantable a commitment of the patient under a sworn certificate of examiners in lunacy.

DEATH OF DR. OLIVER M. DEWING

After a brief illness, Dr. Oliver M. Dewing, Superintendent of Long Island State Hospital fell a victim to an acute attack of pneumonia, probably of a septic character, and after an illness of eight days, he died at the hospital in March, 1910. At the conference of Superintendents with the Commission in Lunacy held in Albany, July 12, 1910, the following resolution was adopted and spread upon the minutes of that meeting:

Whereas, in the dispensation of Providence, Dr. Oliver M. Dewing has been removed from our ranks, we desire to testify to his good work while among us, and to express deep sorrow at his departure. Now, therefore, be it

Resolved, That we, the Lunacy Commission and the Superintendents of the State Hospitals, in conference assembled, make record of our affection and respect for our departed brother.

Untiring in his work for the relief of human suffering and unwaivering in his efforts to maintain a high standard of care of those committed to his charge, he exhibited the traits of the ideal superintendent and the wise physician.

He will be missed by all, in our work and gatherings, and we share in the bereavement of his family the sorrow which cannot be measured by words.

CHARLES W. PILGRIM,
ARTHUR W. HURD,
ALBERT WARREN FERRIS.

THE PREVENTION OF INSANITY

Five years ago, Professor Adolf Meyer, then Director of the Psychiatric Institute of the State hospitals for the insane, urged the attention of the psychiatrists to the fact that a study of measures tending to the prevention of insanity should be undertaken equally with preparations for the care and treatment of those already insane.

The average number of new cases received into the New York State Hospitals each year is over 6,500 persons, while from 24 to 29 per cent as many are discharged recovered each year. About 2,000 patients die annually and a large number are discharged as so much improved that it is fair to assume that they will recover in the care of their own families. The net increase of the total number of the insane under treatment each year reaches nearly 1,200.

There are several preventable causes of insanity, chief among which is the use of alcohol. Of the insane in this State, 26.8 per cent become insane through the use of alcohol; that is, in these cases, while other causes operated, the determining cause has been the use of alcohol, either in excessive or in so-called "moderate" quantities. Over 30 per cent. of our insane men owe their psychosis to this cause. In a study of 961 cases of insanity in Manhattan State Hospital, which was made by Superintendent Mabon and Clinical Director Kirby, the entire causation being known in each case, 55 per cent of the men and 22 per cent of the women owed their insanity to the use of alcohol, as the precipitating factor.

Syphilis is the cause of insanity in about 15 per cent of our total number of cases, including all cases of general paresis, in 85 per cent of which this dangerous disease is known to have existed. The use of morphine, cocaine, chloral, acetanilid, and other drugs furnish a small proportion. Excessive fatigue, including extraordinary stress and strain, also produces its fairly large quota. All these agencies are controllable and avoidable or entirely preventable. The only logical course as well as the only economic course to pursue is to take up promptly and vigorously the consideration of the prevalence and incidence of these causes and take measures for their limitation and control.

This work will, of course, include a study of the environment of the families that produce cases of insanity, including their food, clothing, occupation, education, diversion, religious tendencies, worries, difficulties, discouragements and all factors that go to up-build character, to produce or to undermine personality and to join in the production of what is called temperament. The first serious effort in the present campaign for the prevention of insanity consisted in an address read before the members of the American Medico-Psychological Association at their annual meeting at Washington, D. C., in May, 1910, by Dr. Ferris, President of the New York State Commission in Lunacy. The title of this paper is, "*Possible Preventive Measures in Insanity.*" The alarming increase of known insanity was shown in the statistics given, including the statement that in 1890 the population of New York State was 6,171,586, while the number of known insane was

16,006; in 1910, the population of the State has increased to 9,113,279, while the number of known insane has increased to 32,650. Thus, while the population of the State has increased 46.7 per cent the number of known insane has increased 103.9 per cent.

The measures suggested for limiting the production of insanity are as follows:

1. *Field work by special physicians attached to the staffs of the State hospitals.*—By this is meant that a male physician and also a female physician (or a female social service worker) shall be joined to each hospital to visit and study localities which seemed to be especially productive of insane cases received by that particular hospital. With access to the case histories of patients these field workers will be in possession of the knowledge of what are the precipitating factors in the production of the mental trouble and can proceed to explore the homes of the patients with the idea of making practical suggestions as to hygiene, sanitation, change of food, adjustment of difficulties, diminishing of undermining agencies, the proper rearing of children, etc.

2. *Social services by lay committees.*—By this is meant the co-operative activity of members of after-care committees and members of local board of managers and other philanthropic men and women who will give their time and thought to finding homes, friends and employment to discharged patients.

3. *Co-operation of physicians and special societies.*—It is suggested that the co-operation of physicians can be obtained in two ways:

First.—By securing the presence of the family physician at the staff meetings at which the patient is presented for a consultation and for general study, for this is the method which operates as a routine measure in all our State hospitals.

Second.—By the organization of an out-patient department in connection with each State hospital as is now in operation at St. Lawrence State Hospital in Ogdensburg. At the staff conference the family physician is made familiar with the history of the patient from the psychiatrist's standpoint, and his attention is drawn to early causes and contributing agents and to the earliest developments of mental abnormalities which have resulted in men-

tal impairment. The possibilities of harmonizing, managing or avoiding undermining circumstances and correcting deep underlying causes, such as morbid mental hygiene, are unfolded and serve as suggestions, to the general physician for his guidance in the case of other possible patients. The out-patient department is conducted as a bureau of consultation where family physicians can receive advice and suggestions from the staff of specialists, without fee, retaining their own patients and where patients who have sought no physician's advice can be helped and in some cases urged to enter the hospital as voluntary admissions.

The construction and equipment of psychopathic wards in connection with a general hospital in each large town and in connection with several general hospitals in each city is work that should be taken up by the general practitioners. In these wards or pavilions, maintained as a part of the general hospitals, borderland or undetermined cases are received for observation and care, pending their commitment or their disposition; well-oriented, voluntary cases may receive initial temporary treatment; and decent hospital accommodation may be substituted for the jail and the lockup.

Women's aid societies connected with churches, temperance societies, and young men's christian associations should be enlisted in the good work of after-care or "Social Service."

4. *A campaign of interest and education.*— This constitutes the last preventive measure advocated at present, and includes distribution of literature concerning the causes of insanity, warning ignorant or unthinking young people from inviting the undermining agencies that so frequently produce mental impairment. It also includes a set of free lectures covering the history of the occurrence and treatment of insanity and the various conceptions of it, such lectures being illustrated by stereopticon pictures, some on moving films. Special features should be made of the substitution for the asylum and keepers of the olden time of hospitals and nurses of the present day, with the comfortable and complete equipment for modern nursing which now obtains.

The second step in the campaign for the prevention of insanity was taken by the State Charities' Aid Association of New York

City, which issued a pamphlet in June, 1910, calling attention to various papers written on this or cognate topics and urging that a movement be established at once, on the same lines as that for the control of tuberculosis.

A meeting will be held early in October to plan a set of public meetings at which papers will be read to arouse initial general interest in the work.

PRIVATE LICENSED HOUSES

The number of private houses licensed by the Commission, under the provision of the Insanity Law, has remained the same as last year, namely, twenty-two in all. No new applications were received during the year for licenses.

The Bloomingdale Hospital, White Plains, N. Y., being the psychopathic department of the New York Hospital, is licensed to receive 360 patients. An attractive feature of the life of the women inmates consists in a class in constructing baskets, boxes and other articles, out of ramie, jute, willow, etc., which is under the direction of Mrs. Amsden, the accomplished wife of one of the assistant physicians. Dr. Samuel B. Lyon remains the medical superintendent. Dr. Theodore I. Townsend, formerly at Danemora State Hospital, succeeded Dr. August Hoch as assistant physician, Dr. Hoch having become director of the Psychiatric Institute of the State Hospitals on Wards Island.

Providence Retreat, Buffalo, N. Y., suffered a loss in the death of Dr. William C. Krauss, for many years the consulting physician, and a psychiatrist of high rank. He has been succeeded by Dr. Charles F. Howard, formerly president of the Prison Commission of the State. The institution is housed in its new building, which provides ample accommodation of a superior class and is admirably adapted for its purposes. This institution is conducted by the Sisters of Charity. Dr. John J. Twohey continues to be physician in charge and Dr. William H. Ross has recently become assistant physician, and is resident in the hospital.

Marshall Sanitarium, Troy, N. Y., licensed to care for ninety patients, has suffered somewhat during the past year from changes in the personnel of its two assistant physicians, Dr. Hiram Elliott remaining physician in charge.

Long Island Home, at Amityville, N. Y., under charge of O. J. Wilsey, cares for 114 patients. The repairs and partial rebuilding of the main structure were satisfactorily concluded, subsequent to the fire of a year ago and considerable refurnishing has been made. The Commission is of the opinion that a resident female physician is desirable at this institution.

Brigham Hall Hospital, at Canandaigua, N. Y., under the charge of Dr. Robert G. Cook, secured as assistant physician Dr. Henry C. Burgess to succeed Dr. W. G. Mack, resigned.

Sanford Hall, at Flushing, N. Y., under the charge of Dr. W. Stuart Brown, is licensed to receive forty-four patients. During the year Dr. W. G. Russell resigned and was succeeded by Dr. James M. O'Neill as assistant physician, who was formerly on the staff of the St. Lawrence State Hospital.

St. Vincent's Retreat, at Harrison, N. Y., under the charge of Dr. Swepson J. Brooks, continued to receive women patients only, under its license limiting it to 150 patients. It is under the care of the Sisters of Charity. The Commission is of the opinion that this institution should have a resident female physician.

Breezehurst Terrace, at Whitestone, N. Y., is under the charge of Dr. Daniel A. Harrison, with whom is associated Dr. D. R. Lewis. This institution is licensed for thirty-five patients.

The Pines, at Auburn, N. Y., under the charge of Dr. Frederick Sefton, whose assistant physician is Dr. Guy R. Montgomery, is limited to twelve patients. Dr. Sefton has in use, both winter and summer, a tent, which forms with its subdivisions a very habitable structure for an appreciative patient.

Waldemere, at Mamaroneck, N. Y., has for its physician in charge Dr. E. N. Carpenter. Dr. W. B. Cunningham, the assistant physician, resides in the institution, which is licensed for twelve patients, and consists of a main building and a cottage.

Greenmont-on-the-Hudson, at Ossining, N. Y., continues to be under the care of Dr. Ralph L. Parsons, physician in charge, and Dr. Ralph W. Parsons, associate physician. It cares for six patients, all of whom live with the families of the physicians.

Dr. MacDonald's House, at Central Valley, N. Y., is under the charge of Dr. Carlos F. MacDonald, at one time medical member of the State Commission in Lunacy. His assistants are Dr.

Clarence J. Slocum and Dr. Alton L. Smiley. Separate structures, resembling comfortable country clubs, with three cottages, form the institution.

Riverview Sanitorium, at Fishkill-on-Hudson, N. Y., continues to be under the charge of Dr. James R. Bolton, and is licensed for ten patients, who are cared for in two buildings, one on either side of the highway.

Interpines, at Goshen, N. Y., is a private house licensed to receive fifty-six patients, conducted according to the homeopathic system of medicine, by Dr. Frederick W. Seward, physician in charge and his assistant, Dr. Frederick W. Seward, Jr. An additional assistant physician has been added during the year, in the person of Dr. Irving Dewey Williams.

Glenmary, at Owego, N. Y., a private institution limited to fifty patients, consists of three buildings, the main house being devoted to the residence of the physician and charge nurse and a few patients and the two separate buildings being devoted, respectively, to male and female patients. A change in the physician in charge has occurred during the year, Dr. Christopher J. Patterson having succeeded to that position. Dr. Patterson was formerly in the State hospital service.

Vernon House, at Bronxville, N. Y., continues under the charge of Dr. William D. Granger, and the number of patients it is limited to receive is twelve. The building for patients is a large gray stone mansion, and the residence of the physician is in an interesting and ancient cedar-shingled house on the old road from New York to Boston.

Dr. Combes' Sanitarium, on Jackson avenue and Flushing bay, near Flushing, N. Y., is under the care of Dr. E. T. Murray, physician in charge, and Dr. J. J. Mulcahy, assistant physician. The number of patients in this institution is limited to forty-six, and there is one building in which all are accommodated.

West Hill (formerly The Knolls), is situated on Two Hundred and Fifty-second street, a short distance west of Broadway, New York City. This institution is owned by the Riverdale Sanitarium Company, and the physician in charge is Dr. Flavius Packer. The number of patients is limited to twenty, and the accommodations consist of a large old stone house, and three cottages of different sizes, accommodating from one to eight patients.

River Crest, at Astoria, Long Island, is nearly opposite the foot of One Hundred and Eighth street, New York City. It is licensed for 132 patients, who are accommodated in a number of buildings that are near the large mansion which stands near the center of the property. Dr. J. Joseph Kindred is the proprietor and consulting physician, while Dr. William Elliott Dold is physician in charge, assisted by Dr. Ward Sampsell.

Knickerbocker Hall, at Amityville, N. Y., is under the charge of Dr. Bronislaw Onuf. The sanitarium is licensed for fifteen patients, all of whom are women.

Dr. Kellogg's House, Riverdale, New York City, located on the corner of Riverdale lane and the Albany post road, is under the charge of its owner, Dr. Theodore H. Kellogg, the physician in charge. The number of patients is limited to four, and they are accommodated in one room.

Dr. Bond's House at 960 North Broadway, Yonkers, N. Y., is under the charge of Dr. George F. M. Bond, who is assisted by Dr. Haig A. Sims. The patients in this house are limited to ten in number and beside the dwelling-house there is a building in which are the billiard and reading rooms for the male patients.

BRAVERY OF NURSES AND ATTENDANTS

The Commission desires to testify to the faithful and efficient work of the nurses and attendants who have charge of the patients in the State hospitals, and it considers it a duty, as well as a pleasure, to commend especially the following nurses and attendants for acts of bravery in the performance of their duties. It should never be forgotten that every year there are cases of violent outbreaks by individual patients, and we believe that these are treated with good judgment and courage by those who are in charge of the patients.

The following cases are instances of special bravery, but of necessity do not include the hundreds of nurses and attendants, who are quietly, faithfully and courageously each day doing their duty in caring for the sick people.

UTICA STATE HOSPITAL.

A male patient who, while out for exercise, jumped into a small pond on the grounds, was followed into the water and rescued by an attendant.

HUDSON RIVER STATE HOSPITAL.

Attendant Arthur King, while attempting to separate two patients who were having an altercation, was assaulted by one of them and received a fracture of the nose.

BUFFALO STATE HOSPITAL.

Miss Anna E. Cooney, at risk to herself, put out a fire which was consuming the clothing of a patient who had ignited her clothing with suicidal intent.

ROCHESTER STATE HOSPITAL.

In three separate cases women nurses have relieved suspended patients during attempts at suicide, thereby saving life. The ready and timely rescues were made by Mrs. Thompson, Mrs. Polley, Mrs. Hughes, and the Misses Gainey and Beane.

MANHATTAN STATE HOSPITAL.

On August 31, patient M. M. ran suddenly, under impulse, into the East river from the recreation pavilion, which is within a few rods of the river. Misses Catherine Leonard and Katherine Lenihan, two of our charge nurses, immediately ran after her into the water, which was waist deep. The patient threw herself down in the water. Miss Lenihan first succeeded in reaching the patient, and Miss Leonard immediately followed and assisted after great struggling on the part of the patient who intended to drown herself. After much difficulty the patient was brought out of the water. They were unable to take her back to her ward until other assistance came.

On August 28th, a patient working near the coal dock threw a lump of coal at another. Becoming frightened at his act he ran to the dock and jumped overboard. Three attendants nearby rushed to the rescue and in a trice one of them, Fireman John Lawlor, was lowered by the heels, head down, grasped the sinking patient and both man and patient were drawn up to the dock.

October 22d, while the patients were in their exercise ground, a patient suddenly broke from them, ran to the road and threw himself under the wheel of a loaded cart passing by. Two attendants, Messrs. John Cassidy and William Flanagan, close on

his heels seized the wheel and by sheer strength held it, lifted the loaded cart upward and passed it over the prostrate form of the patient, who was unhurt.

Attacks by patients on employees are of such routine occurrence on the wards of the institutions that, unless very serious in character, they are rarely reported. The following, however, are worthy of note:

At the Utica State Hospital, an attendant in charge of a lawn party was stabbed in the abdomen with a weeding iron, receiving a wound five inches long. Prompt attention saved his life.

At the Willard State Hospital, the foreman of the shoe shop was attacked by a patient temporarily employed as an assistant who stabbed him in several places with a shoe knife, none of the injuries proving fatal.

At the Central Islip State Hospital, a male patient attacked the gardener with a shovel, inflicting several cuts on his head, incapacitating him for duty for some time. A female patient at the same hospital struck a dining-room attendant on the head with a bowl while the patients were at dinner. Another patient bit an attendant, causing a lacerated wound of the right index finger.

Miss McGovern, an attendant, had right forearm bitten by a patient.

Miss Julia Geaney, supervisor, was assaulted by a patient, who cut her over the right eye with her shoe.

A patient in ward 13 attacked Miss Mulvanna, attendant, pulled out a lot of her hair, causing several swellings on her head and so injuring her that she was obliged to go off duty.

Miss Crosby, in charge of a dining-room, was attacked by a patient, who beat her, tore her lips with both hands and tried to bite her neck. Her nose was swollen and her eyes discolored.

Attendant Buckley, after coming from breakfast, was emptying a patient's pockets of bread and rubbish, when, without notice, the patient hit him on the mouth, splitting his upper lip.

A patient hit charge nurse Crosby on the right eye, causing a discoloration and swelling of same, also cut him on right brow.

Attendant William Lee was struck by a patient. As a result his teeth were loosened in the lower jaw and laceration of gums

resulted. This same attendant was also bitten by another patient into bone of small finger on the right hand.

Charge nurse Daniel F. McCarry was struck by a patient with the heel of a shoe, causing probable fracture of the eleventh rib.

Lizzie Bryan, a nurse, was kicked in right side of abdomen by a patient, who also pulled out some of her hair.

Charge nurse Daniel F. McCarry suffered from a dislocation of the right thumb inflicted by a patient.

A patient attacked Miss Sullivan, charge nurse, pulled her hair and kicked her.

A patient in ward 16 gave Miss Corcoran, nurse, such a severe hair pulling that she was obliged to go off duty.

Miss Annie Loughlin received a bite on the first finger of left hand from a patient while helping to give her a sedative.

A patient, in endeavoring to kick another, accidentally hit the chief supervisor on the shin, causing a severe injury.

Attendant P. J. Duhig received a fracture of a rib as the result of an attack by a patient.

A patient made a murderous assault upon Attendant Quincy Doyle, who was in charge of a coal party, hitting him with a shovel, which was aimed at the attendant's head. In warding off the blow the attendant received a large abrasion on the right elbow and wrist, which confined him to his room for several days.

An unprovoked attack was made on charge nurse Walsh by a patient who hit him on the nose causing a fracture.

Nurse Lyon had both eyes discolored by a patient.

Miss Mary O'Connor, a nurse, was bitten by a patient and her right thumb badly lacerated.

Charge nurse Daniel F. McCarry was bitten on the left arm by a patient and the wound was infected.

A patient in the prolonged bath, assaulted pupil nurse Lavinia M. Springstead, pulled her hair out by the roots, scratched her ear and kicked her severely.

Charge Nurse Daniel F. McCarry was struck by a patient and two teeth broken. He was also bitten on the right arm by a patient.

Cornelius Lyons, a nurse, was struck by a patient and both eyes discolored.

While patients were going out from dinner when crossing staff

hall, Supervisor Callaghan was suddenly struck by a patient; his left eye was slightly discolored and the side of his face was swollen.

Miss Marie Fleckenstein received a fracture of third finger of left hand caused by a patient in camp D.

Miss Sweeney, supervisor, was bitten on left forearm by a patient.

Attendant John Cassidy was kicked in the shins by a patient. The abrasions unfortunately became infected.

A patient, when requested to put his clothes outside his door by charge attendant McNamara, jumped on him and fastened his teeth in the attendant's left arm.

Attendant Emes, while taking a patient to dinner, was struck in both eyes.

Quarrelling patients were separated by charge nurse J. O'Neill, who received a large scratch on a finger. The wound became infected and was incised twice. He was under medical treatment for three weeks.

Charge attendant Walsh was knocked down on the tiled floor and bruised by a patient.

A patient attacked Attendant Ring, knocking him down, his head striking against a chair, causing a lacerated wound on the forehead.

When asked to take his feet from the table by Attendant Quinlan, a patient struck the attendant on the nose, causing discoloration under both eyes and swelling of left eye.

CENTRAL ISLIP STATE HOSPITAL

James McLoughlin, attendant, received a wound above his left eye inflicted by being struck with a shoe in the hand of a patient while in an epileptic convulsion. The attendant was confined to his bed for a few days.

Attendant William Burns was suddenly attacked by a patient with a shovel, receiving lacerated wound and contusions about the face. He was obliged to remain off duty for five days.

SUICIDES AND ACCIDENTS AT THE STATE HOSPITALS

The Commission is obliged to record a considerable number of suicides and serious accidents during the year. Among the suicides reported details are furnished concerning the following:

At the Willard State Hospital, a male patient, while detailed for light work about the grounds, committed suicide by throwing himself before the van of the supply train; another patient committed suicide by hanging himself with a roller towel in the lavatory; a male patient stabbed himself in the abdomen and died two days afterward.

At the Middletown State Hospital, a patient temporarily on parole from the institution wandered about the country and finally called at the house of a nearby farmer asking for shelter. Later, he informed his host that he had swallowed mercury tablets. Death ensued within a short time.

At the Buffalo State Hospital, a female patient who had improved to such an extent as to justify her employment about the institution committed suicide by suspending herself from a window guard in her room while dressing; a male patient suffering from alcoholic insanity committed suicide by hanging himself with a torn sheet, and shortly afterward a female patient in the same institution committed suicide in an identical manner; a female patient, although under constant supervision, because of suicidal tendencies, succeeded in breaking a nurse's lantern against her breast, causing burns from which she died within a few hours despite the efforts of the nurses and patients nearby to extinguish the flames; a male patient succeeded in so arranging a pillow under the bed clothes as to represent himself and thus eluding observation slipped into a near-by bath room and hanged himself from the window sash by a bed sheet.

At the Binghamton State Hospital, a patient succeeded in escaping from pursuing attendants, rushed to the river bank and plunged into the water with suicidal intent; she was rescued with considerable difficulty. A male patient escaped from the dining-room and was later found drowned in the Chenango river.

At the Rochester State Hospital, a suicide occurred at the summer camp on the shores of Lake Ontario. A patient who had been regarded as fairly contented with hospital life was disappointed at not receiving a visit from her husband. After night-fall she walked across the garden and threw herself into the lake, her body being discovered thirty minutes afterward; another female patient thrust her head into the fire place on the ward, the door of which

had sprung open. Her hair was practically burned from her head but otherwise she sustained no permanent injury.

At the Long Island State Hospital, a male patient committed suicide by drowning in the bay.

At the Kings Park State Hospital, a male patient who had been confined to bed for three weeks succeeded in some unknown manner, in obtaining a knife and severed the blood vessels in his wrist. The efforts of the three physicians who were called at once were unavailing and the patient died. A female patient made a desperate effort to commit suicide by strangling herself with her hair, but was unsuccessful.

At the Manhattan State Hospital, a patient who had parole of the grounds jumped into the river running by the island and was drowned, though the body was not discovered for several weeks when it was identified at the morgue. A male patient while being transferred on the hospital steamer from Bellevue Hospital to the Ward's island dock broke away from the attendant who had him in charge and jumped into the river. A second attendant without a moment's delay jumped into the river and after a severe struggle with the patient succeeded in rescuing him. Extraordinary bravery and strength was required in this rescue because of the desperate efforts of the patient to destroy himself, and also his rescuer. Later, to the rescuing attendant, Mr. Froelich, was awarded a medal of honor for bravery by the State authorities.

At the Gowanda State Hospital, a male patient committed suicide by hanging himself with a roller towel in the water section. Another patient who had parole of the grounds and who had for five years been assigned to an open ward in an unlocked room was seen going one evening, as was his custom, to a spring in the nearby grove for a drink of water. No alarm was felt in the morning over the patient's nonreturn as it was assumed he had probably journeyed to his home. Late in the afternoon of that day, however, his body was found suspended from a branch of a high tree on the picnic grounds a mile distant from the hospital. This patient had never even mentioned suicide. A desperate attempt at suicide by drowning made by a male patient was prevented by another patient who happened to be passing.

Two deaths were reported during the year resulting from assaults by one patient on another. In one instance at the Bingham-

ton State Hospital, a patient assaulted by another was found afterward to have a fracture at the base of his skull resulting in death twenty-four hours later.

Cases of asphyxiation resulting from the lodgment of meat and other articles of food in the larynx were reported from the St. Lawrence and other State hospitals.

At the Central Islip State Hospital, two patients assigned to dormitory duty became involved in a quarrel and fought desperately for several seconds before the fracas was observed. When separated each was found to have bitten off a portion of the lips of the other.

INSANITY AND THE LIQUOR TAX

As the use of alcohol is responsible for the presence in the hospitals of over 28 per cent of the patients, and is a contributing factor in many other cases, the Commission is of the opinion that it is but fair and just that the tax imposed upon the liquor traffic should be increased in order that it may pay an increased revenue to the State for the purpose of paying in part at least the expenses to which the taxpayers are put by the care of those patients whom the State is compelled to house, clothe, feed and supply with medical attendance because of their use of alcohol.

WORK OF DEPORTATION OFFICERS

In the succeeding pages the Commission presents the report of the activities at the State Board of Alienists or immigrant examiners during the past year.

Under the general direction of the Commission, this board with one of its members inspecting the line of immigrants passing daily through the Ellis island admission pavilion makes at least partially successful efforts to decrease the number of dependent and defective aliens. Southern Europe, Ireland, Russia and Sweden continue to furnish the larger number of these classes, and out of the 453 aliens returned during the year, 74 were returned to Austria, Hungary; 86 to Italy; 78 to Russia and 18 to England.

A better spirit has prevailed during the year on the part of the authorities of neighboring states in accepting insane patients as charges upon nearby communities, and notwithstanding the widely

divergent laws of the states on the seaboard as to the length of time required for individuals to acquire residence, the Commission has through correspondence succeeded in securing the acceptance on the part of the states or friends of the patients residing therein of 212 patients.

Table showing aliens and nonresidents returned to their homes between October 1, 1909, and September 30, 1910.

ALIENS

Africa	2
Austria-Hungary	74
Belgium	1
Bohemia	2
Canada	12
Egypt	1
England	18
Finland	13
France	12
Germany	49
Greece	12
Holland	1
Ireland	34
Italy	86
Japan	1
Newfoundland	1
Norway	5
Poland	7
Roumania	2
Russia	78
Scotland	7
Sweden	14
Switzerland	2
Syria	1
Turkey	9
Wales	2
Unclassified . . .	7
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Total . . .	453

NONRESIDENTS

Alabama	1
California	2
Connecticut	26
Delaware	1
District of Columbia	6
Florida	1
Georgia	1
Idaho	1
Illinois	11
Indiana	1
Kansas	2
Kentucky	2
Louisiana	1
Maine	1
Maryland	4
Massachusetts	18
Michigan	2
New Jersey	55
Ohio	4
Oregon	2
Pennsylvania	35
South Carolina	3
Tennessee	1
Texas	2
Vermont	3
Virginia	7
Washington	1
West Indies	16
West Virginia	1
Wisconsin	1
Total	212

REPORT OF BOARD OF ALIENISTS

State Commission in Lunacy, Albany, N. Y.:

GENTLEMEN.—We beg to submit the following report of the operations of this Board for the official year ending September 30, 1910:

Under the direction of your Commission this Board has continued to be represented at Ellis Island by one of its members, and a report of his work is herewith presented. The other members of this Board have continued to examine all of the admissions to the psychopathic ward at Bellevue Hospital, at the observation ward, Kings County Hospital, as well as other hospitals and institutions where insane aliens or defectives may be found.

Dr. Sidney D. Wilgus, the former chairman of this Board, during the first six months of the year, under your directions, made several trips to the various State hospitals acting in conjunction with your medical inspector. In April Dr. Wilgus, the chairman of this Board since its organization, and who by his earnest efforts was largely responsible for its success, resigned to assume the superintendency of the Elgin State Hospital at Elgin, Ill. Since his resignation his work has been divided among the other members of the Board.

Under date of March 16, 1910, an amendment to Rule 36 of the Immigration Regulations of July 1, 1907, under the signature of the Honorable Daniel J. Keefe, Commissioner-General, was forwarded to this office. This order materially reduces the time of maintenance of insane aliens in the various State hospitals and sets forth that bills for maintenance should be made out only from the time the warrant of arrest is served on the alien. Heretofore the maintenance of the alien was paid from the date of notification to the Immigration Commissioner by this Board and averaged from eight to ten weeks, and under the new rule it will average about five weeks. As the treasurers of the State hospitals were receiving maintenance from the government at the rate of \$5 a week for these aliens, this new ruling will cause considerable

Board of Alienists — Annual Report

financial loss to the State, although section 19 of the Immigration Act of February 20, 1907, requires "that all aliens brought to this country in violation of law shall, if practicable, be immediately sent back to the country whence they respectively came on the vessels bringing them. The cost of their maintenance while on land, as well as the expense of the return of such aliens, shall be borne by the owner or owners of the vessels on which they respectively came."

It further sets forth "that the Commissioner-General of Immigration, with the approval of the Secretary of Commerce and Labor, may suspend, upon conditions to be prescribed by the Commissioner-General of Immigration, the deportation of any alien found to have come in violation of any provision of the Immigration Act, and that the cost of maintenance of any person so detained resulting from such suspension of deportation shall be paid from the immigrant fund." This would appear to indicate that the hospital maintenance of our insane aliens should be paid during the time of their entire residence at the hospital.

During the year there has been a substantial increase in the work of this Board. In addition to the work at the Immigrant Station at Ellis Island, this Board has investigated and examined at various hospitals, institutions and homes 1,549 suspected alien or non-resident insane. Of this number 663 verifications of landing were obtained. It was found that 154 of these were overtime, varying from one day to twelve months; 53 were under five years, this fact plainly setting forth the necessity of increasing the deportable period of an insane alien to five years as intended in the bill introduced in the United States Senate by Hon. S. Lee Overman in April, 1910. In the majority of 207 aliens whose cases were investigated and found to be beyond the deportable period, it was found that they were insane from causes existing prior to landing, and in fact many of them had been in various hospitals and institutions for the insane in their homes abroad. The greater proportion of these will continue to be public charges in our hospitals for the remainder of their lives. The fact that an alien cannot be deported after the three-year limit is becoming well known and the

Board of Alienists — Annual Report

tendency to keep them outside of the jurisdiction of a public hospital for the insane is becoming greater, as frequently we have examined cases in the various reception hospitals where the deportable period has just elapsed and it has been found that they have been maintained at their homes or in some of the cheaper sanitarium.

In referring to Table 1 it is seen that sixty-two insane aliens were deported from their homes on our certificates. The majority of these cases had at one time been inmates of the various hospitals and were removed from the same in order to avoid deportation, although again in several instances when the relative of the insane alien was informed of the intentions of this Board to deport the alien and the matter was explained to them thoroughly, they willingly agreed to the deportation.

Under the directions of your Commission we have issued 446 medical certificates. Of this number 399 were deported on Federal warrants; 25 died under certificates; 12 warrants were canceled and the aliens landed on bond. Of this number six were removed from State hospitals to private institutions; two died in the hospital in a short time after the warrant was canceled, and four are still inmates of the hospital, maintenance being paid by the bondsmen. It is well to state here that this bond stipulates that the patient will not become a public charge. Should the bondsmen fail to comply with the terms of their agreement the warrant of arrest can be served and the alien deported, although the three-year limit has expired. Three escaped from the hospitals while under Federal arrest. In the case of four aliens certified, the deportable period elapsed before the warrant of arrest was served although there was a period of from ten to thirty days for the Federal authorities to act; three were discharged from the various hospitals as not insane. On information from private sources ten insane aliens were debarred from this port.

Referring to Tables 8 and 9 it is shown that 95 insane aliens were, upon their request or the request of their friends, deported at the expense of the State, and 84 were deported from the various State hospitals at the expense of their friends; that 35 aliens who had been in this country beyond the deportable period and at one

Board of Alienists — Annual Report

time had been inmates of the various reception hospitals, were, through the efforts of this Board, deported to their countries at the expense of their friends, this making a total of 613 actually deported from the State of New York. It might be well to state that in our investigation of the admissions of insane patients to various hospitals the friends and relatives of these patients frequently request the return of the insane aliens to their native countries, and their friends and relatives often, whenever their means permitted, have cheerfully paid the transportation of the patients and in many instances accompanied them to their homes abroad. The transportation fund is utterly inadequate to meet the many demands upon it by the friends and relatives who are unable to provide transportation for their alien insane in State hospitals who are anxious to return to their homes and cannot be deported under the Federal laws. In view of this fact it would appear to us not only to be a most humane but a very profitable investment on the part of the State to largely increase the appropriation for the transportation of this class of patients to their homes abroad. It would also probably be well to explain the procedure in these cases. Our Board continues closely in touch with the various consular agents in New York City, and as well as the various societies, especially the Italian Benevolent Society, the Austrian-Hungarian Society and the Jewish Federation of Women, all of whom have cheerfully assisted us in seeing that the patient is conducted safely to his or her home abroad, and in no instance have we heard of any of the comparatively large number returned in this manner failing to reach their ultimate destination. Whenever the patient has been without funds a sufficient sum of money has been advanced by your Commission to cover their necessary traveling expenses, and in several instances during the year, when the occasion required, the State provided a trained attendant to accompany them to their homes.

It is shown by Table 10 that 85 non-residents were returned to other States at the expense of the State, and by Table 11 that 166 were returned to other States at the expense of friends, thus making a total of 864 insane removed from this State through the efforts of this Board.

Board of Alienists — Annual Report

As shown by Tables 10 and 11, New York State, and especially New York City, continues to be a Mecca for the insane and dependents of other states, and in many instances it would appear that it is used as a dumping ground for this unfortunate class. We have frequently learned through our investigations that nonresident patients received in our hospitals had been inmates of various hospitals and institutions in other States and only recently discharged, and at the time of their discharge had received assistance from the local authorities and sent to New York, although as a rule they had no relatives or friends residing in this State.

Unfortunately New York State is most liberal in the establishment of a residence. The statute sets forth that a person residing in the State of New York for the period of one year establishes a residence, while in New Jersey they insist upon residence of ten years, and this is practically the same of Connecticut, and in the State of Massachusetts the establishment of a residence is even more complicated and difficult.

During the year we have had considerably more difficulty in inducing the local officials of the State of New Jersey to accept cases who were without a doubt proper charges upon their State, and recently this Board took the matter up with the Honorable Edmund Wilson, Attorney-General of the State of New Jersey, and with various local authorities of Hoboken, Jersey City, Bayonne and Newark, and we have apparently arrived at a more reasonable understanding with this State and it is hoped that in the future there will be less difficulty in getting the various officials to assume responsibility in these cases.

A brief summary of the work of this Board shows that of 1,549 cases investigated 613 were actually deported from the country; 251 nonresidents were returned to other States. In 222 cases of the number investigated it was found that they had established a residence in this State according to our statute. Ten aliens coming under our observation were referred to the State Board of Charities for deportation; 207 aliens were found to be in this country beyond the deportable time but within the five-year limit; 25 aliens died while awaiting deportation; 7 nonresidents died in

Board of Alienists — Annual Report

our hospitals and there are at present remaining in the various hospitals 31 aliens and nonresidents who are unfit to travel; 10 were debarred from the country; 38 remains under certificate awaiting deportation from the various hospitals; 135 remaining under investigation.

Respectfully submitted,

GEO. B. CAMPBELL, M. D.

Acting Chairman.

TABLE No. 1

Deported on Federal Warrants

Central Islip State Hospital.....	169
Manhattan State Hospital	84
Kings Park State Hospital.....	38
Hudson River State Hospital.....	7
Buffalo State Hospital.....	9
Middletown State Hospital	6
Rochester State Hospital.....	4
Long Island State Hospital.....	3
Gowanda State Hospital.....	2
Utica State Hospital	1
St. Lawrence State Hospital.....	1
Binghamton State Hospital	2
Willard State Hospital.....	1
Work house	1
Randall's Island	1
Kings County Observation Ward.....	3
Bellevue Hospital Observation Ward.....	4
Dr. Combes' Sanitarium	1
Home	62
Total	399

Board of Alienists — Annual Report

TABLE NO. 2

Nativity of Those Deported

Russia (Lithuanians, Poles, Germans).....	87
Austro-Hungary (Germans, Bohemians, Poles, Magyars)	79
Italy	65
Great Britain (Ireland, Wales, Scotland).....	57
Germany	32
Sweden	14
West Indies	13
Greece	8
Norway	8
France	7
Turkey (in Asia).....	7
Netherlands	5
Roumania	4
Canada	3
Switzerland	3
Belgium	1
Cuba	1
Denmark	1
Japan	1
South Africa	1
Turkey (in Europe).....	1
British Guiana	1

 399

TABLE NO. 3

Sex of Those Deported

Males	228
Females	171

 399

Board of Alienists — Annual Report

TABLE NO. 4

Civil Condition of Those Deported

Married	87
Single	279
Widowed	12
Divorced	21
	<hr/>
	399
	<hr/>

TABLE NO. 5

Ages of Those Deported

Under 20 years	80
20 to 30 years	185
30 to 40 years	93
40 to 45 years	12
45 to 50 years	19
50 and over	10
	<hr/>
	399
	<hr/>

TABLE NO. 6

Occupations of Those Deported on Federal Warrants

Bootblacks	5
Butlers	4
Butchers	3
Bricklayer	1
Broker	1
Bookmaker	1
Cooks	6
Clerks	7
Clockmakers	2
Contractor	1
Domestics	118
Draftsman	1
Dentist	1

Board of Alienists — Annual Report

Dressmaker	1
Florist	1
Fireman	1
Farmer	1
Governess	1
House wives	23
Hall boys	2
Laborers	108
Laundress	2
Ladies' maid	1
Locksmith	1
Merchants	5
Mechanic	1
Machinist	1
Musician	1
Operator	1
Peddlers	8
Prostitutes	3
Painters	3
Porters	2
Priest	1
Printers	2
Paperhanger	1
Sailors	6
Soldier	1
Steward	1
Salesman	1
School boy	1
Students	2
Shipping clerk	1
Sculptor	1
Tinsmith	1
Valets	2
Waiters	14
Tramps	8
No occupation	18

Board of Alienists — Annual Report

TABLE NO. 7

Time in United States of those Deported on Federal Warrants

Under 1 month.....	35
From 1 month to 3 months.....	32
From 3 to 6 months.....	53
From 6 to 9 months.....	26
From 9 to 12 months.....	65
From 12 to 15 months.....	21
From 15 to 18 months.....	15
From 18 to 21 months.....	24
From 21 to 24 months.....	34
From 24 to 30 months.....	36
From 30 to 36 months.....	58
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	399

TABLE NO. 8

Deported by State

Central Islip State Hospital.....	65
Manhattan State Hospital.....	20
Kings Park State Hospital.....	9
Hudson River State Hospital.....	1
	<hr/>
	95

TABLE NO. 9

Deported by Friends and Themselves

Central Islip State Hospital.....	45
Manhattan State Hospital.....	20
Kings Park State Hospital.....	6
Hudson River State Hospital.....	2
Binghamton State Hospital.....	1
Bellevue Hospital, Observation Ward.....	3
Kings County Hospital, Observation Ward.....	7
Home	35
	<hr/>
	119

Board of Alienists—Annual Report

TABLE NO. 10

Returned by the State to Other States

Alabama	1
Connecticut	9
Colorado	1
Georgia	2
Illinois	6
Kentucky	1
Kansas	1
Maryland	4
Massachusetts	11
New Jersey	21
Pennsylvania	19
South Carolina	1
Texas	2
Virginia	4
Vermont	2
	<hr/>
	85
	<hr/> <hr/>

TABLE NO. 11

Returned by Friends to Other States

Arkansas	1
Connecticut	25
California	7
District of Columbia	4
Florida	2
Illinois	5
Indiana	2
Kentucky	1
Louisiana	14
Maryland	3
Missouri	3
Michigan	1
Mississippi	1
Maine	1
New Jersey	43

Board of Alienists — Annual Report

New Hampshire	1
North Carolina	1
Ohio	5
Oklahoma	2
Pennsylvania	25
Porto Rico	1
Rhode Island	1
South Carolina	6
Tennessee	1
Texas	2
Utah	1
Virginia	5
Wisconsin	1
	<hr/>
	166
	<hr/> <hr/>

TABLE NO. 12

Summary

Cases investigated	1,549
Deported from the State to other countries	613
Nonresidents returned to other states	251
Died while awaiting deportation	25
Died, nonresidents	7
Debarred from landing in the country	10
Referred to other departments for deportation	10
Aliens and nonresidents unfit to travel	31
Overtime and nondeportable	207
Awaiting deportation in hospitals	38
Under investigation	135
Negative findings	222

REPORT OF ELLIS ISLAND INSPECTOR*To the State Board of Alienists:*

Relating to the detail at the immigration station of this port I have to say that the conditions in general, concerning the examination of the mentally defective continue unchanged since the last report, but, in the remodelling of the main building now under way, it is hoped that increased facilities will be available, thus

Board of Alienists—Annual Report

permitting of still better results in this branch of the work. During the year there has been a gradual increase in the number of immigrants and a more stringent enforcement of the law seems to show a slightly better class asking admission to this country.

In the early summer two of the acting assistant surgeons, alienists, resigned to accept more lucrative positions, and this work has been continued by commissioned medical officers of limited experience in psychological medicine, although efforts are being made to secure suitable experienced alienists to fill the vacancies. Considering the shortage of medical officers, which involves more or less double duty upon the surgeons, the result can be regarded as satisfactory as could be expected.

The new rule made by the Department of Commerce and Labor relative to the period for which the Federal government will pay the State for the hospital maintenance of aliens is liable to work to the financial disadvantage of the State. In connection herewith it might be said that the Federal government still owes several thousand dollars on this account but unofficially I am informed that the matter has recently been taken up and efforts will be made to dispose of the obligation as rapidly as possible. In March the Commissioner of Immigration served notice upon the various steamship companies and the interested parties calling attention to the subject of detention and deportation and urging that a more strict inspection abroad be maintained, and agents inquire more carefully into qualifications to land upon arrival before accepting immigrants for transportation. The number of detentions and deportations vary with the steamship lines, some being relatively small and others unduly large, due principally to the lack of proper attention by agents abroad as to the quality of people they accept.

Strong efforts are to be made at the next session of Congress to secure more stringent exclusion of undesirable immigrants.

Table A shows the work in this line at Ellis Island. Table B that of doubtful cases referred to me for verification, and Table C shows a comparison of the past two years of the work at Ellis Island.

Respectfully,

WM. E. SYLVESTER, M. D.,

Examiner.

Board of Alienists - Annual Report

Table A, concerning mental defectives at Ellis Island from October 1st, 1909 to September 30th, 1910

DATE	Number of immigrants	Number held for mental examination	CERTIFIED					DEPORTED					Landed by Department and died
			Insane	Idiots	Feeble-minded	Imbecile	Epileptics	Insane	Idiots	Feeble-minded	Imbecile	Epileptics	
1909													
October.....	71,642	64	11	.....	7	2	1	10	.....	8	1	1	3, (1 U. S. citizen, 1 insane, 1 died).
November.....	72,713	103	11	2	7	5	1	7	2	8	4	2	2, (1 insane, 1 imbecile).
December.....	59,109	68	12	.....	7	3	2	13	.....	6	3	1	1, (1 epileptic).
1910													
January.....	42,859	61	4	.....	7	3	2	5	.....	9	2	2	1, (epileptic).
February.....	50,873	81	12	1	4	3	1	9	.....	3	4	1	4, (1 insane, 1 imbecile, 1 idiot).
March.....	121,398	129	6	2	18	2	.....	9	1	14	2	.....	1, (died).
April.....	118,206	120	12	.....	13	2	.....	11	.....	15	1	.....	2, (2 U. S. citizens).
May.....	113,308	82	8	1	8	2	.....	9	.....	11	1	.....	2, (1 U. S. citizen, 1 insane).
June.....	85,216	68	10	2	7	3	3	8	1	6	2	2	2, (1 U. S. c., 1 idiot).
July.....	59,564	42	4	1	1	3	1	4	1	4	2	1	1, (epileptic).
August.....	69,696	59	2	2	5	1	2	3	.....	4	2	1	.....
September.....	61,494	52	5	.....	17	1	.....	5	.....	14	1	.....	.....
Total.....	935,755	929	97	11	111	30	15	93	5	100	25	12	19

Board of Alienists — Annual Report

Report of Board of Alienists, 1910

TABLE B.— Showing result of certain work of their representative at Ellis Island.

	Referred for verification after failure to do so by immigration department	Verified.	Citizen	Over-time	Not verified	Died	Not committed	Deserters or stow-aways	On hand
On hand October 1, 1909.....	9	.....	.....	.....	.....	.....	.....	.....	.....
Referred for verification during the year	96	85	1	7	2	2	2	2	4

Report of Board of Alienists, 1910

TABLE C.— Comparative table concerning mental defectives for the past two years at Ellis Island.

MONTH	1908-1909					MONTH	1909-1910				
	Number of immigrants	Number held for mental examination.	Number certified	Number deported	Number landed		Number of immigrants	Number held for mental examination	Number certified	Number deported	Number landed
1908						1909					
October.....	43,194	83	27	21	.....	October.....	71,642	64	21	20	3
November.....	34,392	103	28	25	.....	November.....	72,713	103	28	23	2
December.....	45,762	78	13	16	.....	December.....	59,109	68	24	23	1
1909						1910					
January.....	42,868	110	13	10	2	January.....	42,859	61	16	18	1
February.....	66,761	119	11	10	2	February.....	50,873	81	21	17	.....
March.....	112,727	139	21	16	1	March.....	121,398	129	28	26	4
April.....	112,403	171	34	31	.....	April.....	118,206	120	27	27	1
May.....	100,387	131	26	25	3	May.....	113,308	82	19	21	2
June.....	79,591	166	30	39	1	June.....	85,216	68	25	19	2
July.....	61,039	129	34	30	3	July.....	59,564	42	10	11	2
August.....	54,169	96	11	11	4	August.....	69,696	59	12	10	1
September.....	61,494	82	25	19	3	September.....	71,171	52	23	20	.....
Total....	814,787	1,407	273	253	19	Total..	935,755	929	254	235	19

REPORT OF MEDICAL INSPECTOR RUSSELL

State Commission in Lunacy, Albany, New York:

GENTLEMEN.—In compliance with the request of your Commission, I beg to present the following report relating to my work as medical inspector from October 1, 1909, to June 1, 1910, when I was transferred to the position of superintendent of the Long Island State Hospital.

During the period referred to I made fifty-four visits to the State hospitals and licensed private institutions under the supervision of the Commission, four visits to unlicensed institutions to determine whether or not the law relating to the care and treatment of insane persons in such institutions was observed, and four visits to places conducted by municipalities for the temporary detention and observation of persons who appeared to be insane. Three State hospitals in other states were also visited during the period. By direction of your Commission five visits to the State hospitals and one to an unlicensed institution were made for me by Dr. Wilgus of the Board of Alienists.

Considerable time was given during the period to the examination of candidates for medical positions in the State hospitals under the direction of the State Civil Service Commission, and several papers and addresses relating to the care of the insane were prepared. In October, 1909, an address on "The Medical Service of State Hospitals for the Insane" was made at the Illinois State Conference of Charities and Corrections. This was published in *The American Journal of Insanity* for January, 1910. In November a paper on "The Care and Commitment of Insane Persons by Health Officers" was read at the Convention of Sanitary Officers of New York State. This was published in the *New York Medical Record* of January 22, 1910. In December a lecture on "Insanity and Public Health" was given at Cornell University in the course on sanitary science and public health. A paper on "Further Extension of State Care of the Insane" was contributed to *The Survey* of January 8, 1910.

Medical Inspectors — Annual Report**THE STATE HOSPITALS**

At the visits to the State hospitals the routine described in previous reports was attended to. Two thousand two hundred and seventy-nine patients received since previous visits were given the special attention prescribed by the statute, and, as in previous years, many appeals and complaints, made by patients recently admitted and others whose stay had been longer, were listened to and given such attention as seemed to be required. The appeals had reference to detention only as a rule, and reference was made to them individually in the notes of the visits filed at the hospitals and at the office of the Commission.

The question of the discharge of patients from the State hospitals has been discussed with other questions relating to the care of the insane in previous annual reports and little that is new can be added. As, however, it is not likely that another opportunity will be offered me for discussing officially this and other kindred questions and the recommendations which seem to me appropriate, I beg to be permitted to review them briefly with such additions as occur to me as the result of further experience.

DISCHARGE OF PATIENTS

One of the duties specified in the instructions given the medical inspector was to assist in "the discharge of aliens, dotards, hemiplegics, idiots, or other cases unsuitable for detention in the hospitals." This duty was particularly specified because of the desire to relieve the crowded hospitals of as many cases as possible who were not in need of the kind of care and treatment which the State hospitals were expected to furnish. In the notes of the visits a number of patients of the types mentioned in the instructions and also of inebriety have been referred to, and recommendations made by the medical inspector undoubtedly led to the discharge of some. It was found, however, that the number of dotards, or aged persons suffering from mild deterioration only, in the hospitals was fewer than had evidently been expected. Many who on superficial observation seemed to be of this character proved on investigation to be suffering from profound mental disorder. In some instances, cases who were discharged upon my

Medical Inspectors — Annual Report

recommendation, were found, at later visits, to have been readmitted in worse condition than before. The aged are, in fact, more subject to mental disorders than younger subjects, and many of them are extremely difficult to take care of. Those of them who are found to be simply childish and feeble are, I believe, seldom kept long by the superintendents. They are discharged to the care of their relatives or of the poor authorities. There are, indeed, some who, when admitted, are suffering from an acute disturbance from which they recover, who are afterward retained because they are physically unfit to be transferred to another place. What has most impressed me in regard to the senile cases is that so many of them are so seriously ill when admitted and live so short a time afterward. The expense of commitment of such cases and the misery of their transfer, sometimes for many miles, to a State hospital ought not to be required. These cases come from all sorts of places of course and under some circumstances their commitment and transfer is the only course to follow. It is to be hoped, however, that the health officers, to whom the duty of attending to these cases before their commitment now falls will find a better way. In previous reports, I have recommended that properly organized infirmaries supported by the county or city in which they were located be provided for such cases. In many instances, too, under the direction of the health officers, a nurse in the house would be sufficient. There is little danger of abuse in such a system for the tendency would always be to turn over troublesome cases to the State in order to save local expense. To maintain good standards, skilled supervision of the methods could be supplied by the State. In fact, it would well repay the State to contribute to the support of the cases under such a system in order to keep them out of the hospitals. Its establishment would probably have to be the outcome of local sentiment which could, however, be stimulated by the State by a presentation of the facts in regard to the cases and their needs.

The number of idiots or feeble-minded cases in the State hospitals is quite large. Most of them have found their way to the hospitals by reason of some episode in the nature of a real psychosis or an outbreak due to adverse or irritating conditions. Once

Medical Inspectors — Annual Report

under commitment it is difficult to find a way to discharge them. They ought really to be in an institution for the feeble-minded, but the provision made by the State for this class of cases is entirely inadequate. In the State hospitals they greatly augment the number requiring custodial care and emphasize this feature of the State care of the insane. To meet this difficulty I have recommended that the provision for feeble-minded and epileptic cases be increased and the institutions placed under the supervision and control of the same board as the State hospitals. This would, indeed, greatly increase the work of this board, which would have to be more completely organized with several divisions, but would increase efficiency. Under the present system the cases cannot be properly classified, and not infrequently they are refused at both classes of institutions. A system similar to that recommended is in operation in Massachusetts, Illinois, Iowa, and some other states.

The number of inebriates and habit cases without a psychosis received at the State hospitals has, during the past two or three years according to my notes been fewer than previously. This is especially the case in regard to drug cases. The plan of managing inebriety outlined for New York city in a law passed last year will, if applied to the whole State, probably do much to bring about more intelligent management of this problem and a resulting reduction in the number of all classes of alcoholic cases which are to be found in such large numbers in the State hospitals is surely a reasonable expectation. Better legal control of the sale and use of habit forming agents would seem to be a practicable method of further decreasing the number of cases caused thereby.

The appeals for discharge from the State hospitals have come principally from unrecovered cases, most of them obviously unfit to be at large. There is, however, a certain proportion of cases in all the hospitals who could be discharged if a suitable environment were available. As Dr. Meyer has well said, the environment is often in need of treatment as well as the patient. Some of these cases are, indeed, useful workers in the hospitals, and, for other reasons, discharge may to some seem to be of doubtful propriety, even though the patients are not dangerous. There are, however, no indications that society is disposed to require permanent incarceration.

Medical Inspectors — Annual Report

tion for all insane persons. This is shown by the reluctance of the Legislature to provide sufficient accommodation; also by the large number of unrecovered cases discharged each year, nearly equaling the number of recovered cases, many of them at the solicitation of friends and relatives who, if the superintendent prove unwilling, often appeal to the courts with success. It is also shown by the reluctance felt in having insane persons committed. Instead, they are often permitted to remain without suitable care and treatment until they can no longer be tolerated. It is safe to assume that the public is prepared to provide State hospitals only for insane persons for whom institutional care is clearly indispensable. This is the only aspect of the problem of insanity with which the public has yet been seriously concerned.

A broader and more comprehensive policy seems now, however, to be possible. Better supervision of mental cases and of the methods of dealing with them before they are committed and after their discharge seems now to be clearly indicated. The extension of the parole period to six months and the after care system started by the State Charities Aid Association have already opened the way for a system of supervision of discharged cases. This could easily be provided for by the employment by the State of special nurses for this work. The agents who look up the financial resources of the patients might also assist by interesting the friends to remove suitable cases and by obtaining information about the home environment. The introduction of a modified boarding-out system, similar to that which has been in operation in Massachusetts for many years, would also be helpful in facilitating the discharge of patients, many of whom are without friends capable of furnishing any assistance. A paper on "Family Care of the Insane in Massachusetts" which was published in the minutes of the Conference of November 14, 1907, deals with this system in some detail.

The discharge and deportation of the alien and nonresident insane are already attended to with great efficiency. Three physicians are employed solely at this work. It has seemed to me that this might now be correlated with all the work relating to the discharge of patients and to their support by private funds. To this

Medical Inspectors — Annual Report

end I have, in previous reports, recommended that a separate division of the department be created with this in view. This division should be in charge of a well-qualified alienist, whose visits to the hospitals should be solely with reference to questions of discharge and support. All appeals should be referred to him, and should receive more adequate attention than is now possible in many cases. In co-operation with the superintendent he should, by means of the financial agents and special nurses, seek ways of discharging suitable cases to their relatives or others who might be willing to receive them either without charge or temporarily for a moderate sum for board. Such cases should be kept under supervision for a time, and the services of the after-care committees and other agencies utilized to place them in a suitable environment where they would be self-supporting. The plan which I have suggested may to some seem inadvisable or even impracticable and objections to it could easily be made. It is, however, not unlike what is already carried out in Massachusetts where I am informed it is intended that every case in every hospital shall be reviewed once a year by a medical officer of the board of insanity with a view to discharge, and where a system of supervision outside of institutions has long been carried on. It is at least the only plan which I have been able to conceive of by which, under present conditions, the number of discharges from the hospitals might be increased.

REDUCTION OF THE NUMBER OF ADMISSIONS.

Since the State-Care Act was passed the number of admissions to the State hospitals has increased out of all proportion to the increase in the State's population. The methods of public care of the insane have been greatly improved and the people have more and more availed themselves of the relief afforded by the hospitals to the insane and their friends. Local facilities for the treatment of mental cases of any type are to be found in a very few places, and the State monopolizes the work. This accounts in some measure for the great increase in the number of cases, though there are some reasons for believing that the prevalence of mental diseases has actually increased also. The large proportion of foreign-born among the inmates of the hospitals, much larger than

Medical Inspectors — Annual Report

the proportion of foreign-born in the general population, would lead to the conclusion that the increase is due principally to immigration. This is a question of the utmost importance and provision for its study by capable investigators would be a wise measure for the State. This, I believe, should be part of the work of the alienists employed in attending to deportation. The co-operation of the United States Government should also be secured. The facts available should be dispassionately considered with reference to ascertaining whether immigration is really accountable for the increase, and if so, whether it is because of the character of the immigrants, to the conditions to which they may be exposed in this country, or to other conditions some of which might perhaps be controllable. The information obtained by the Board of Alienists certainly reveals that a considerable proportion of the deportable alien insane were either insane when they arrived in this country or had been previously in institutions for the insane in their own country. Better control of immigration would apparently do much to reduce the number of insane in the State.

Better management of mental diseases in their early stages is a measure that would probably reduce the number of admissions to the State hospitals. To this end I have recommended that the methods employed by local officials and the local facilities provided in dealing with mental cases previous to commitment should be brought more definitely under the supervision of the State. Last year a law was passed providing for transferring from the poor authorities to the health officers the duties relating to the preliminary care and commitment if necessary of mental cases requiring the attention of officials. The health officers are under the supervision and control of the State Commissioner of Health and to this extent represent the State. Like most other general practitioners, however, they have little knowledge of mental diseases, and if the system is to be successful means should be employed to instruct them, at the expense of the State if necessary. Without better facilities, too, even the best informed could not give the cases suitable care. Better local provision for the treatment of mental cases is, therefore, necessary. In order that the State might be in a position to assist in securing this and to exer-

Medical Inspectors — Annual Report

cise supervision over the methods employed in dealing with uncommitted mental cases, two years ago, a bill was introduced into the Legislature providing for the extension of the powers and duties of the Commission in Lunacy so as to cover this work. The bill failed to pass, but should, I believe, be again introduced and passed. Local institutions for uncommitted mental cases are sure to be established during the next few years. There are several now and one has been established since the bill referred to failed two years ago. The medical colleges are already anxious to utilize such institutions for the purposes of medical teaching, and in some cities which I have visited, only a little stimulation seems to be needed to bring about the establishment of facilities for the care of mental cases at some of the general hospitals. A development of this kind would undoubtedly reduce the number of cases sent to the State hospitals. Private philanthropy would be more likely to become interested, and the burden of caring for the cases would be taken up more generally than at present when everyone looks to the State. Many cases in earlier stages than when they are considered suitable for commitment would seek relief in these local institutions, and in some instances they would never be sent to the State hospitals. The medical profession and the public would also gradually become more intelligent in regard to the whole subject. It is, however, important, in order that proper standards may prevail, and all interests be safeguarded, that skilled supervision by the State should be provided for before the development of local institutions has progressed any further. The work of supervising the methods of dealing with uncommitted mental cases by the health officers and in institutions might properly belong to the division of the department suggested for supervising and assisting in the discharge of patients. Much of the detail in both kinds of work could be best attended to under the direct control and supervision of the State hospitals, carrying out to some extent the suggestion of Dr. Meyer in regard to district organization with the hospital as a center. The work of correlating the various agencies, and supervising and informing would, however, have to be done by a central department.

Medical Inspectors — Annual Report

OVERCROWDING.

In the inspection of the State hospitals, the most serious obstacle to good administration noted during the period covered by this report, has been the overcrowding, especially in the hospitals of the metropolitan district. This has been referred to in previous reports and was illustrated in the report of last year by a concrete example of conditions observed at one of the hospitals. As this is typical, I beg to relate it again:

“Since the preceding visit four months before, 741 patients had been received, of whom 511 remained. Two hundred and sixty-four (264) of these cases were no longer on the reception wards, but were scattered through the wards for chronic cases, frequently amid surroundings quite unfavorable to their peace of mind and recovery. Ordinarily, it might be expected that these were cases which were found on admission to be chronic, and had been classified in accordance with what was considered to be for their best interests. On the contrary, 57 of them were noted to have been ill only a short time previous to their admission, and many showed, when seen, distinct indications of recoverability. As an example of the conditions under which they were cared for, it was found that 97, 32 of whom were noted to have been insane only a short time previous to their admission, were in a group of wards which contained 790 patients, with only two physicians to attend to their medical study and treatment. All the patients in this group took their meals in the same dining room, and no special provision of any value was made for the hopeful cases. The conditions, even in the reception wards at this hospital, were also quite unsatisfactory. Nearly all the available space where beds could be placed had been utilized, and the wards for men especially were much overcrowded, containing 75 more cases than they were intended for. The number of physicians and nurses were much below what was needed and what is usually found in the reception services of the State hospitals, and the conditions were unsanitary for patients and attendants alike, both from the mental and the physical standpoint.”

The submerging of the individual patient and his needs in this way can scarcely be economical to the State, and seriously reflects

Medical Inspectors — Annual Report

on our intelligence and humanity. There can be little doubt that the proper means of relief is by additional hospitals. These are needed most of all in the metropolitan district, but other populous sections of the State such as the Albany-Troy-Schenectady section should also be supplied. If funds are not available from current revenues, bonds should, I believe, be issued so as to permit the institutional care of the insane to be put on an efficient footing. The problem of State care of the insane has, it seems to me, not been fairly dealt with. Previous to 1890, there were a number of city and county institutions and the burden was distributed. In 1890, the State Care Act was passed and gradually all the local institutions went out of existence and the State assumed the full responsibility for the institutional care of all the insane. In 1895 and 1896 the immense aggregations which had accumulated in two institutions under the city and county system in the metropolitan district came into the State system, almost doubling the number of patients to be cared for. The development of the State system to deal with the problem thus presented and to provide for the rapidly increasing numbers, has, it is fair to say, been far from commensurate with the needs. No new hospital has been provided for the metropolitan district, and only one new one has been added in the whole State since the State Care Act was passed. There can be no doubt that the establishment of State care has resulted in raising the standard of care received by the insane in general throughout the State. The effort to absorb so quickly the accumulation of years in the local institutions has, however, effected materially the high standards which had been set by the State in the provision previously made at Utica, Buffalo, Poughkeepsie and Ogdensburg. In order to relieve the congestion in the metropolitan district, the hospitals of other districts have in some instances been enlarged without regard to what was needed for the good classification and treatment of the insane of those districts. The demand for providing for mere numbers has been so urgent that the requirements for good treatment have to some extent, had to be ignored. There is then, it seems to me, some danger that custodial methods may prevail to an extent that may seriously impair the active hospital methods required to bring about the maxi-

Medical Inspectors — Annual Report

imum number of discharges. This would be anything but economical for the State in the end, however it might appear on superficial consideration. There seems at present to be no way of coming to a definite decision in regard to the maximum number of patients which can be provided for in one institution without loss of efficiency in treatment or of economy in administration. This subject was discussed quite fully at the conferences of April 23 and September 29, 1908, and that there are decided disadvantages in efficiency where the number exceeds 2,000 seemed to be shown. This is borne out by my own observations. An examination of the statistics of a number of years indicates, too, that the proportion of discharges on admissions is on the average greater from the institutions which accommodate less than 2,000 patients than from the larger institutions. *There may be other reasons than the number of patients accommodated to account for this difference, though the larger institutions are unquestionably as ably conducted as the others, and the class of patients received in each instance does not seem to present sufficient variation to account for it. This should, I believe, be carefully investigated for, if it proves to be as seems to be the case, the apparent economy in administration of the larger institutions will be offset in a most serious manner.

For the metropolitan district the growing difficulty in securing suitable sites seems likely to necessitate larger aggregations of patients than should be permitted in other sections of the State. Two types of institutions would, therefore, in this district seem advisable; those more accessible to the city to be organized with special reference to active hospital measures, the more distant ones to present more of the home and industrial features. The cases should be distributed from the observation wards with reference to their special needs, and in part by transfer. Each type of institution should receive original admissions and every precaution should be taken to prevent the one or the other from being

* Proportion to admissions of discharges from State hospitals, five-year period: Hospitals of 2,000 or more: Recovered 23.7 per cent.; recovered and improved, 45.9 per cent. Hospitals of less than 2,000: Recovered, 28 per cent.; recovered and improved, 48.66 per cent. (St. Hospitals Bulletin, Vol. II, p. 319.)

Medical Inspectors — Annual Report

looked upon as a place for incurables only. Treatment should be provided for in each, but the more accessible hospitals should be smaller in size and more elaborately organized than those at a distance in order that the cases for whom active hospital measures were most needed would be in no danger of being submerged. The cases should be committed to one type of institution or the other with discrimination as to whether active hospital measures were most necessary or merely hygienic, outdoor life, with training in normal activities. This may not be an ideal system, but seems to meet the requirements of the metropolitan district better than a system in which too many cases requiring close personal attention for their cure are lost in a crowd, however well the crowd may be managed.

THE MEDICAL SERVICE

In previous reports I have referred to the improvement in the work of the physicians in the State hospitals. The change in the methods employed in examining the cases during the period while I was inspector was as marked as the change in the methods of physical diagnosis after systematic methods of palpation, percussion and auscultation were introduced. Those who represent that modern psychiatry is concerned principally with verbal diagnosis and classification must be ignorant of the great improvements which have been made in the methods of getting at the significant and useful facts in the cases and in turning them to account in prognosis and treatment.

While the improvements in the medical work of the hospitals are due in part to the general advance in medical knowledge and methods, so far as they relate to psychiatry and neurology, they are the result of the training and instruction given to many members of the staffs under the system introduced by Dr. Meyer as director of the Psychiatric Institute. It is of the utmost importance to the insane and to the State that the standards thus set up be maintained and extended. For this well qualified physicians and alienists are essential. In previous reports I have directed attention to the difficulties experienced in satisfactorily filling vacancies on the staffs, and have from time to time made recommenda-

Medical Inspectors — Annual Report

tions with a view to overcoming these. The adoption of the salary schedule recommended by a committee of the conference would, I believe, be of great assistance. Better provision for homes for a larger number of married men would also make the work more inviting as a career. One of the difficulties connected with the medical service is the meagre training of many of the men who take up the work. It would be better if conditions were created by which men who had received a broader training and experience in general medical practice would be attracted to the service. All who are aware of the neglect of mental diseases in the curriculum of nearly all the medical schools must also realize the need of systematic special training for the men who are entering upon the work. The effect of giving such a training to comparatively few is sufficient proof of what could be accomplished, and surely the slight expense involved is more than offset by the improvement in the service rendered the insane and the State. The future of the splendid system of State care which has served to make New York the model for all the other States will be seriously jeopardized unless the medical service is kept up to a high standard of efficiency. It is surely significant when, in one year, four men who had long occupied important positions in the service leave to accept positions in other fields of work, three of them as superintendents in other States.

THE NURSING SERVICE

For a number of years increasing difficulty in securing suitable attendants and nurses has been experienced in most of the hospitals. One of the reasons for this is undoubtedly the small wages paid. A few years ago the schedule of wages was, as the result of the political activity of some of the employees concerned, made statutory instead of leaving it to be adjusted by the Commission in Lunacy, the Governor, the Comptroller and the Secretary of State as previously. The result is that insufficient provision has been made for building up the training schools for nurses so as to make the training of sufficient value to attract desirable candidates to whom the compensation during the period of training would be a secondary consideration. The position of superin-

Medical Inspectors — Annual Report

tendent of nurses established by the Commission a few years ago has been filled in only a few places, although at one hospital where the position is admirably filled the superintendent informed me that the results in the better nursing of the patients had far exceeded anything that he had been able to anticipate. A better teaching and supervising organization would, I believe, do much to dispense with the necessity for increasing the wages of the pupil nurses. In order to retain well-qualified graduates, however, much better wages are necessary than are paid at present. To permit insane persons to be cared for by inferior ill-trained attendants is to invite neglect and abuse, for which those who fail to provide what is needed to secure a better service will be responsible. Better wages, under a schedule framed to suit present needs, better hours, better quarters, better training and better supervision are, I believe, all needed for improving the nursing service.

The course for attendants which was introduced during the period covered by the report had not been in operation long enough for me to learn enough about the results to permit of any reference to them. The frequent changes in the force of attendants and the inadequate organization and system for teaching purposes which prevail are likely to interfere considerably with the efficiency of this system.

OTHER DEPARTMENTS

The need of better wages and living conditions has not been so apparent among the employees of other departments of the hospitals as in the nursing service. There are some positions in which, however, it would probably add to efficiency and economy if higher wages were paid. It seems inadvisable to specify any of these because observations at the different hospitals show that the needs vary in different parts of the State. In the metropolitan district especially the standard of wages and of rents which may have to be paid out of commutation in lieu of maintenance at the hospital are quite different than elsewhere. For this reason the inelastic statutory schedule cannot be effectively applied to the varying conditions in the different parts of the State where the hospitals are located.

Medical Inspectors — Annual Report**COMPLAINTS OF PATIENTS**

Many complaints made by patients or their friends were given whatever attention seemed necessary during the period covered by this report. The more serious were referred to in the notes of the visits. Among the complaints which have been made to me while medical inspector some have been noted because they seemed to be normal reactions of quite intelligent patients who told of them with honest intent and clear-sighted purpose. They may serve to illustrate the effects of conditions and experiences which can only be appreciated when looked at from the standpoint of the patients.

One of the most frequent of the complaints referred to related to the close confinement indoors. Some spoke of the lack of sun-rooms and piazzas for exercising in in winter. Another class of complaints was about the methods of bathing. A number of women objected to the spray baths. Others complained of the lack of privacy and that the nurses spoke crossly and ridiculed them when they protested. Others referred to the way in which they were hurried in the bath. Some spoke of the lack of a place for a comb and brush and other personal effects in their rooms. Others complained that the same towel and wash cloth were often used on a number of patients. Feeble women sometimes spoke of being obliged to go to bed in a cold bed in lighter and scantier night clothing than they were accustomed to. Some complained of the amount of light in the dormitories at night and of the noise made by the nurses. Other complaints related to the lack of sufficient milk and fruit in the dietary, and the extent to which they were sometimes hurried at their meals by the nurses. The enforced association with offensive patients where the classification was not good was not infrequently complained of. In some instances convalescent patients referred to what seemed to them lack of tenderness and consideration for the newcomers by the nurses, who were sometimes brusque and faultfinding with patients who were only afraid or had broken rules and customs of which they had not been informed.

These complaints were noted and are now recorded because they reveal a degree of sensitiveness and appreciation which many even intelligent persons do not credit the insane with possessing.

Medical Inspectors — Annual Report

IMPROVEMENTS

In reviewing the experience of more than six years as medical inspector for your Commission, it is satisfactory to note the many improvements which have developed during that period.

The buildings constructed and the fixtures installed during the period have been better than what had been furnished just previous, which were quite inferior. Cheap construction is anything but economical for State hospitals, though elaborate architectural effects and ornamentation are unnecessary. The supplies purchased for the hospitals have become more nearly standardized, and the joint contract system has been gradually improved. The quality of articles furnished by the prisons has been raised. In some of the hospitals great improvements have been made in the heating and lighting plants. The provision for fire protection has been improved both in equipment and methods. A system of drilling the patients and attendants to leave the wards in an orderly way on fire signal has been extended throughout the whole department. The improvements in the medical service have already been referred to. Several new positions have been added, some of which made possible a number of promotions. The examination system has been much developed and improved so as to permit of a thorough investigation and test of the qualifications of the candidates by well-qualified examiners. The staff conferences have completely changed in character and have become an essential feature in the study and treatment of the cases. The medical records contain much more valuable information than formerly and are of more use as guides to an intelligent understanding of the cases and for scientific studies. The physicians are more industrious and work to more useful and more definite purpose. The statistical studies which form the basis of the wonderfully improved tables and charts made by the statistician of the Commission are far more valuable than any which have heretofore been produced by any group of institutions for the insane. The new series of *The State Hospitals Bulletin* is a very creditable production and presents some of the best psychiatric studies made in this country. The interhospital conferences and the meetings of the Ward's Island Psychiatric Society have

Medical Inspectors — Annual Report

proved extremely serviceable as a stimulus and aid to the physicians in the hospitals, and as a means of bringing their work to a critical survey. The programmes of the superintendents' conferences with the Commission have also been much improved in regard to the subjects discussed, and the care and system with which they are presented. The minutes of the conferences contain some very valuable material. Similar improvements have been made in the nursing methods and in the training of nurses and attendants in spite of the difficulties in securing suitable persons for the service. The courses of instruction and training have been more carefully systematized and formulated in both theoretical and practical schedules. A course of instruction for all attendants has been established. The wages of all the employees have been increased though still inadequate in the positions in the nursing service and in some other positions. Efforts have been made to decrease the hours of work, though little progress has been made in the case of those who are engaged in the trying task of giving personal attention to the patients. Some of the best nurses' homes yet erected by the State have been furnished during this period. In a number of the hospitals affiliations for supplementary instruction of the nurses have been made with general hospitals, and the training schools of the State hospitals have, in some instances, been registered under the Nurse Practice Act by the State Department of Education. In the treatment of the patients corresponding improvements of those already noted have been made. The degree of liberty permitted has been increased, in some hospitals very strikingly. The practice of locking patients up at night has been practically discontinued throughout the State, although in my early inspections it was found to be quite prevalent for a large proportion of the patients in some of the hospitals. The amount of mechanical restraint and of seclusion employed has been diminished, and the system of records and reports introduced by the Commission has served to keep it more definitely under control. The amount of sedatives administered has also been reduced, and better measures such as more skillful nursing and management, fresh air, and hydrotherapy have been substituted in the treatment of excitements. The

Medical Inspectors — Annual Report

equipment for these measures has been added to extensively. The special reception buildings which have been supplied have permitted more concentration of the means of giving careful study and hospital treatment, when needed, to the cases received. During the past year especially, marked progress has been made in the application of occupations, physical exercises, and games in the treatment of the cases, and in many instances most gratifying results have been obtained. Better provision has been made for bringing the cases under treatment early, by the amendments to the law relating to commitment for five days on the petition and certificate alone, and to the admission of voluntary patients. The after-care system of the State Charities Aid Association also established during the period, and the measure passed last winter which puts insanity on the footing of a public health problem have extended to the insane outside of institutions a better system of relief. Within the hospitals better provision has been made for separating the sick from tuberculosis and acute infectious diseases from the other cases; in some instances in special buildings well adapted to the requirements.

Some improvements have been made in the dietary, especially with reference to more careful adaptation to special needs. These have, however, been less than in some other features of the hospitals, and further attention should be given to this important subject. Better equipment has been provided for the hospital laundries, but, so far as I have observed, commensurate improvements in the work done have, in many instances, failed to appear. The reasons for this are discoverable and should receive attention. In this connection, I beg to refer again to recommendations made in previous reports, that experts in the different departments of the hospital work be employed to investigate, recommend, and in some instances instruct for a sufficient time to establish improvements.

Other improvements could be cited, and altogether it can be safely said that, during the comparatively few years during which it has been my privilege to observe the system, State care of the insane has made considerable progress. The most serious defects seem to be due to the inadequate provision made for the large

Medical Inspectors — Annual Report

immediate expenditure needed to furnish sufficient accommodation in establishing the system, and in the insufficient attention which has been given to perfecting the organization and methods needed to carry on the work efficiently.

CIVIL SERVICE METHODS AND THE STATE HOSPITALS

That the examination system has been of real service in eliminating political and personal considerations in making appointments to positions in the public service must be conceded by all who are familiar with the facts. The eligible lists prepared under the direction of the Civil Service Commission serve also, in the same way an employment agency does, to facilitate appointments. It seems doubtful, however, whether enough attention has yet been given to the methods employed in testing the qualifications of candidates. This seems to be especially true in regard to positions in which personal qualifications such as native energy, tact, sound common sense, and self-control are as important as technical information, and to positions in which executive ability is more important than theoretical knowledge. The result is that in making appointments to such positions the appointing officers have not always sufficient confidence in the lists, and frequently try to find ways of ignoring the results of the examinations. This is demoralizing to the whole system. To conduct examinations for important positions properly is a very laborious task as it involves an investigation of the qualifications of the candidates as thorough as would be made by a conscientious employer who knew that he must be solely responsible for the character of the service rendered by the person to whom the appointment was given. To carry out the examination system in this thorough way requires an amount of thought and attention and special knowledge which could only be furnished by a more elaborate and expensive organization than is likely to be provided. The difficulty has been overcome in regard to the medical service of the hospitals by an arrangement which has been made for examinations by men who are connected with the service, and have therefore not only a thorough knowledge of what is needed for the work but have also such a vital interest in securing efficiency that they will take the nec-

Medical Inspectors — Annual Report

essary pains. An arrangement similar to this should, I believe, also be made in regard to all the more important positions in the hospitals. It is quite possible for the Civil Service Commission to exercise complete control over such an arrangement which is all that should be necessary.

Another defect is a tendency to narrow too much the field from which candidates may be drawn, often restricting it to the immediate grade below that in which the appointment is to be made, or to the department, the judicial district, or the State, when the widest latitude is needed in the interests of efficiency. Much discrimination is also needed in applying the examination system to positions in which practical efficiency is the principal or sole essential. If practical tests cannot be given the candidates, and no adequate investigation is made of their experience and work in the past, the lists are sure to be unsatisfactory and some other system should be employed.

Nothing is, in my opinion, more important in building up the efficiency of the State hospitals than thoroughly scientific and practical methods of making appointments and promotions under the Civil Service system.

LICENSED PRIVATE INSTITUTIONS

No change took place in the number of these institutions during the period covered by the report. All were visited by me except one which Dr. Wilgus visited. Two hundred and eighty-three committed patients, and one hundred and twenty-five voluntary patients received since previous visits were given the attention required by statute. Of the voluntary patients, twenty-three were found to be in a condition in which commitment seemed advisable and this was recommended. Appeals and complaints made to me were referred to individually in the notes of the visits.

In these notes, in the annual reports, and in special reports, conditions observed in the licensed institutions have been brought to the attention of the Commission and various recommendations have been made. It is, however, difficult to characterize the institutions in general terms, as they differ so widely in size, type,

Medical Inspectors — Annual Report

and expense of maintenance. Some of them—Bloomington, St. Vincent's Retreat, Providence Retreat and Marshall Sanitarium—are benevolent institutions and the income is used entirely for institutional purposes. The others are purely private enterprises which are managed with a view to financial success in the interest of one or more proprietors. These private places differ in size, type, and in the standards of care and treatment and it is difficult to characterize them in general terms. In a general way, however, it can be truly said that the clinical methods employed are inferior to those in the best State hospitals, though in the better places the surroundings are more comfortable and agreeable.

Some of the more serious defects observed in the licensed institutions related to danger from fire, to the commingling of the sexes, to inadequate toilet and bath facilities and to an inferior medical and nursing service. Improvements have been made in all the institutions, in some more than others. There were still, however, during the period covered by this report, a considerable number of patients housed in the third and in one instance in the fourth story of wooden buildings, and some of the other conditions referred to still prevailed. The regulations relating to restraint and seclusion adopted by your Commission resulted in some of the institutions in the complete abolition of these measures of management. Several additional fire-escapes and other features relating to fire protection have also been added at some of the institutions.

It is very unfortunate that private philanthropy cannot be interested more deeply in providing institutions for the care and treatment of patients for whom moderate rates can be paid. This would be a real benevolence. No class of sick persons is so pitifully dependent or so easy to impose upon. As one of the physicians in a private institution said to me, "To be successful in this business, it is the friends you have to treat, not the patient." And so ignorant are people in general in regard to what can properly be expected for the insane that they too are easily deceived. A few high grade benevolent institutions in the neighborhood of the large cities could be run on an almost if not entirely self-supporting basis, and would do much to put some of the inferior private places out of business.

Medical Inspectors — Annual Report

I had hoped, while inspector, to be able to work out a plan for rating the institutions on a percentage basis with reference to the more important features, but there are such marked differences as to type, size and character of the patients that I was unable to settle upon any standards of comparison. It would, however, undoubtedly serve a useful purpose if, in accordance with a suggestion made, I believe, by Commissioner Viele, the notes made by the Commissioners and the medical inspectors at the visits to these institutions be published in the annual reports of the Commission. All references to the patients by name should of course be omitted. This publicity plan is followed by the English Commission in Lunacy.

In my visits to private institutions I have frequently been struck by the concern and sometimes active resentment shown by patients when I was introduced as a representative of the Commission in Lunacy. The title is, I believe, unfortunate and is an anachronism which should be replaced by something more in accord with modern views. The "Board of Insanity," as in Massachusetts, would be better, or possibly something even more in keeping can be suggested. It would seem, too, as though the word insanity might be eliminated from the medical certificates, as a certificate to the effect that the individual was suffering from a mental disease of such a character as to require institutional care would answer the same purpose while avoiding the objectionable word.

CONCLUSIONS

The immediate problem of the State in the care of the insane seems to me to be to provide adequate institutions to put the system on a good footing. This has never yet been done, especially with regard to the metropolitan district, and now a large sum is required either from appropriations, if these are available, or, if not, from the sale of bonds.

The next is to make the whole system more efficient. To do this the administrative organization of the Commission should, I believe, be adjusted and if necessary elaborated so as to accomplish more definitely the particular tasks which can only be satisfactorily attended to by a central department. These relate to

Medical Inspectors — Annual Report

institution supervision and control, to questions of discharge and private support, to the methods of dealing with the insane outside of institutions, to the problem of prevention of insanity, and to legislation. The example of Massachusetts might, in some particulars, be followed to advantage. There, with 12,000 insane and feeble-minded cases under the supervision of the State board, instead of 32,000 insane alone as in this State, four executive medical officers are employed. That the methods employed result in relieving the State of the support of a larger proportion of cases than is found possible in New York* should surely lead those whose interest in the care of the insane relates especially to economical administration to inquire into them and, if they are found satisfactory, to adopt them.

The next problem is, it seems to me, to determine more clearly the degree of control of the details of institutional management which it is profitable for the Commission to exercise. The *power* to control should, I believe, remain with the Commission. More latitude to the superintendents and managers, with more efficient supervision and strict accounting, would, however, probably be attended by better results in the hospitals and give relief to the Commission so as to permit of more attention to questions that it only can deal with satisfactorily.

Improvements in the organization of the hospitals are also, I believe, much needed. Various changes are needed to bring these about. Among them none appears to me more important than to provide means of more systematic training in special lines for the officers and employees. Such training is not available unless furnished by the State and the gain in efficiency would, I am convinced, more than repay the cost. Efforts to reduce the cost of the care of the insane except by means of increased efficiency are bound to fail. The need is there and must be met. To waste effort in building up an immense custodial system without due regard to the possibilities of restoring the individuals to health and usefulness is stupid, inhumane, and in the end wasteful. The number discharged from the hospitals each year equals nearly

* Proportion of discharges to admissions, exclusive of transfers and deaths, for year 1909: Massachusetts, 53.38%; New York, 49.9%.

Medical Inspectors — Annual Report

half the number received. Can there be any doubt of the advantage to the State that would result by increasing this proportion? The number who die equals more than 30 per cent. of the number received. Some of these are acute cases. Would it not be profitable to save more of these and restore them to health? Unfortunately, the more important problems presented by discharges and death are not so easily grasped by the casual observer as the simple fact of the already accumulated and steadily increasing aggregation of cases many of whom are hopelessly incurable. The only proper solution of all the problems seems to be, however, a clearer differentiation of those which can be dealt with best, and then working at each efficiently.

State care of the insane may now be divided into:

1. Supervision of the methods of dealing with mental cases in the communities by health officers and other officials.
2. Institutional care and treatment for those who need it, with due regard to the needs of the different types of cases.
3. Supervision of cases after their discharge with a view to adjusting them to a suitable environment and preventing recurrences.
4. Scientific studies and diffusion of information with a view to dealing more effectively with the causes of insanity.

In conclusion I beg to say that, in recording the views I have formed and the recommendations which seem advisable, which are the outcome of the opportunities given me to study the care of the insane in the State, I am actuated by the thought that the State is entitled to whatever may be of value in them, and at the same time I keenly realize that to observe accurately and judge wisely in such a complex subject is difficult.

For the consideration and courtesy shown me by the members of the Commission and the officers of the institutions I beg to express my deep appreciation and thanks.

Respectfully submitted,

W. L. RUSSELL.

REPORT OF MEDICAL INSPECTOR DORAN

State Commission in Lunacy, Albany, N. Y.:

GENTLEMEN.— I have the honor of submitting my report as Medical Inspector for the last two months of the fiscal year ending September 30, 1910.

Having been appointed to this position August 1st, I have not yet been able to complete one round of all the public and private hospitals under the supervision of the State Commission in Lunacy, and consequently am not in a position to comment at length on the conditions prevailing throughout the service. That has been done for the first eight months of the fiscal year just ended in the report of the former Medical Inspector, Dr. William L. Russell.

Since my appointment, twelve visits have been made to State hospitals; eight to licensed private institutions; one to an unlicensed private institution for the purpose of ascertaining if insane persons were confined therein contrary to law, and one was made for the purpose of interviewing a former attendant who made charges against other persons in the institution in which she had been employed.

Seven hundred and thirteen new patients have been examined in the State hospitals and sixty-three in private institutions. These patients were all suitable for care in institutions for the insane.

Of the new cases examined in the State hospitals, only twenty-seven, or 3.7 per cent of the total were voluntary admissions, while in the private institutions, forty-one, or 65 per cent of the total belonged to this class.

Eight voluntary patients in private institutions were not suitable for that form of admission and their commitment was recommended. In every case where this course was recommended the patient was either in such mental condition as to be unable to appreciate the nature of a voluntary application, or lacked insight and expressed unwillingness to remain in the hospital.

Medical Inspectors — Annual Report

The new patients were given an opportunity to converse with the inspector apart from the officers and employees of the hospital whenever they requested it. Only thirteen patients asked for special interviews which were usually desired for the purpose of discussing the legality of the commitment, requesting transfer to other institutions, asking for discharge, or complaining of treatment received in the hospitals where visited or in other hospitals in which they had been confined.

In all, twenty patients complained of ill treatment and these complaints were investigated as far as possible in the time at my disposal. In some cases the complaint was already under investigation by the hospital authorities. In all cases the superintendent of the hospital was made acquainted with the nature of the complaint, if it was not already known to him. In some cases the complaints were made to the inspector for the first time and the patient had not mentioned any difficulty to the hospital authorities. Eighteen patients complained of detention. In the average case it was easy to see that the patient was not suitable for discharge, while in a few the question could not be settled, without a careful consideration of the patient's history and a thorough discussion of the case with the hospital physicians. Of those complaining of detention, none was considered suitable for discharge.

Two patients complained of insufficient food, but in both cases the complaint was without foundation.

The foregoing complaints have been mentioned in detail in the regular reports of inspections.

I desire to take advantage of this opportunity to express my appreciation of the confidence your Commission has reposed in me and to thank you for your support and assistance in beginning this work.

Very respectfully,

ROBERT E. DORAN.

Medical Inspector.

October 1, 1910.

REPORT OF THE DIRECTOR OF THE PSYCHIATRIC INSTITUTE FOR THE FISCAL YEAR 1909-1910

To the State Commission in Lunacy:

GENTLEMEN.—I beg to submit to you a report of the Psychiatric Institute for the year ending September 30, 1910. For the last eight months of this time, that is, since February 1, 1910, I have been in charge of the Institute.

The plan of work, as shaped by my predecessor, Dr. Adolf Meyer, and put into practice by him, with the help of the Commission in Lunacy and the superintendents of the State hospitals, has essentially two chief aims. (1.) To assist the State hospitals in their endeavors to progressively advance in the fulfilment of their most important functions, that is, the study and treatment of the patients entrusted to their care. (2.) To carry out research into the nature, causes and treatment of mental disorders.

This plan of work, which I found in full operation when I took charge of the Institute, is therefore one in which not only the scientific, but also the immediately practical issues are given a prominent place, so that the activities of the Institute are intimately connected with the daily work of the hospitals. It is a plan which has stood the test of time, and I doubt whether any one who is fully acquainted with it, would question the principles which underlie it. After having acquainted myself thoroughly with this plan, I can say that I am fully in sympathy with its general principles, and the activities of the Institute during the year have been in accordance with it.

In giving an account of the work of the year, I wish, in the following, to discuss this plan a little more at length, while at the same time I desire to point out in what directions lie at present some practical lines for improvement.

MEDICAL WORK IN THE STATE HOSPITALS

When some years ago the more administrative duties of housing and the more general problems of treatment in the State hospitals had been put on a high level of efficiency, the natural step, for

Psychiatric Institute — Annual Report of Director

which a need was felt, was a commensurate advance in the medical work proper. It was then clear that the medical spirit in the hospitals had to become more alive, that the observations of patients had to become more thorough and more accurate, and with it the treatment more individualized, and that the facts should be collected, not only for their immediate use, but also for later, more comprehensive deductions, etc. But it was of course necessary to create facilities which not only made possible such a change, but which also insured the continuance of a more thorough scientific spirit in the hospitals. This involved an adjustment of medical and administrative duties, but it naturally involved a great deal more. It is clear that with our medical schools, as they are even at present with the comparatively small share in the curriculum given to psychiatry, there was no chance for the physicians to obtain training in psychiatry. Hence such training had to be furnished somehow. For this purpose methods of study had to be devised and introduced into the hospitals, the physicians had to be kept abreast with the newer advances in psychiatry, and courses had to be established at the Institute in various topics, notably, in clinical psychiatry, anatomy, physiology and pathology of the nervous system. The excellent work done at these courses is summarized in the last Annual Report by Dr. Meyer. These courses, with the other facilities presently to be spoken of, have undoubtedly raised the standard of the daily work of the hospitals to a degree which should be very gratifying to those who have been instrumental in bringing about the change, above all to Dr. Meyer and his associates. An extensive trip which I made through the hospitals during the summer has shown to me a medical spirit manifested in an intelligent medical interest which the physicians take in their patients, and in the excellency of many observations, which is very different from the conditions which I remember when, some fifteen years ago, I began my psychiatric studies and was able to see the character of the work in the hospitals for the insane at that time. Since February 1, no courses have been given at the institute, partly because there was no immediate demand for them and partly because I desired to become fully acquainted with the work of the hospital staffs in order to decide what kind of courses were par-

Psychiatric Institute — Annual Report of Director

ticularly needed and what subjects were best to take up. As a result a course will be given in the early part of the coming year, comprising instruction in anatomy, physiology and pathology of the nervous system, clinical psychiatry, psychoanalysis and the study of psychogenesis, clinical neurology, with special reference to the technique of examination, and the study of aphasia, agnosia and apraxia. It will be the aim to make such courses, at which only a limited number can take part at a time, if the necessary individualization of instruction is to be preserved, more and more accessible to as many of the physicians in the service as possible. At the same time it would be very desirable that individual physicians should come to the institute for the purpose of working under the direction of the staff, partly in the laboratory and partly in the clinic, in order to perfect themselves in methods of examination and study, or to get advice in special problems which they are pursuing. In this connection should also be mentioned the usefulness of visits to the hospitals by members of the institute, which will be more extended when a sufficient staff permits it.

Furthermore, the plan also involved the extension of the laboratories so that every hospital now has a pathological laboratory with a special man in charge, who also has some clinical duties. While formerly the entire salvation was seen in a pathological laboratory, this view has fortunately changed and we now know that a pathological laboratory is of little use if the clinical observations are not carried out according to good standards. But we also know that such a laboratory is a very important adjunct in a hospital because the studies there furnish most important links in the chain of events of a disease, which are indispensable for an understanding of it; and because no hospital can keep up a medical spirit without having these facts at the command of the physicians. While there are some laboratories throughout the State in which excellent work is carried on, there is room for improvement in others. One of the reasons why the work is sometimes not so good as it should be lies in the fact that it is difficult to find good men who are willing to devote their time to this work which requires interest and training in a special direction, while

Psychiatric Institute — Annual Report of Director

it does not offer the same possibilities of advancement as the clinical positions. It is true that the principle followed in the hospital system, that no man who does laboratory work should be divorced from clinical work, but should keep closely in touch with it, is an excellent one, but the laboratory work, in order to be done efficiently, requires a great deal of the time of those who do it, so that it may be difficult for them to be quite on a plane in clinical psychiatry with those who devote their entire time to the latter. This should be recognized, and I would urge that provisions be made that the laboratory men have a chance to rise to the rank of second assistant physician at any rate, with the possibility of continuing the pursuit of their laboratory work.

Other important means for the fostering of the medical spirit in the hospitals were the introduction of the staff meetings, with the purpose of controlling the observations made by individuals and of making the work to a certain extent the result of a collaboration of the entire staff; the establishment of inter-hospital meetings, at which special problems were taken up in the form of discussion of special cases, or of scientific papers; then, finally, the general co-operation of the institute with the hospitals in the work. Various elements of this co-operation have already been spoken of; one special feature may here be particularly mentioned, namely, the fact that reports are made to the hospitals upon the pathological anatomical material sent to the institute, and at the inter-hospital meetings are given collective reports with special reference to groups of cases.

These topics may be taken up together with the discussion of a plan which I have recently laid before the superintendents, aiming at a closer co-operation among the hospitals and the institute in psychiatric research. It stands to reason, and my trip through the hospitals has confirmed it, that in these hospitals a large and, in general, a well-observed material has been collected and is being collected, a gradual analysis of which would undoubtedly lead to valuable results. For this purpose the working up of certain groups of cases, with special reference to symptom picture, outcome, etiology, treatment, taken up all over the State, or at any rate, by different hospitals, would seem to be of considerable im-

Psychiatric Institute — Annual Report of Director

portance. We must guard against excellent material becoming buried in our records. Such a plan, which of course is not new in the hospital system, but which it would be well to see more systematically and aimfully carried out, besides bringing forth important facts, would undoubtedly further stimulate the medical interest and this has a great practical bearing. There is nothing which helps to increase the efficiency of the medical work so much as active interest on the part of those who do the work in the problems of that branch of medicine with which they are dealing. It is that which sharpens our appreciation of details in observation, which makes us eager to learn all we can from the patients as regards the cause of the disease, the soil in which it develops, the characteristics of it, the why, where and what of the disorder. The study of the case is then no longer one for the purpose of a one-word diagnosis, but it is a sizing up of the condition in all its aspects. It tends, therefore, to get us away from the routine work. Yet all this is not a question of science only, but something which very decidedly reaches into our practical problems, those of prognosis and treatment, while at the same time it has a bearing not on the case in question only, but on the larger problems of psychiatry as a whole, which naturally are important concerns of ours. The scientific attitude and scientific studies, therefore, aside from tending to bring about more remote results, have an important value for the care and treatment of the patients, and it is necessary to do all we can to preserve and foster such a spirit. We all know how great is the tendency for all of us, particularly those who have to deal with a large number of admissions, to become lax in our observations and to follow the path of least resistance which routine offers, and even if the work is done well the results of the daily observations are apt to become diffuse, difficult for any one to have before him at a given time unless we have a tendency to constantly summarize our results and definite problems to work on. Therefore, a comprehensive plan of investigation should be shaped, and for such a plan the inter-hospital meetings are the natural center. At these meetings the results of the work should be related and discussed, and later published in the *Bulletin*. In this way these inter-hospital meetings will exert a

Psychiatric Institute — Annual Report of Director

greater influence and their activity will make itself felt much more throughout the year and be more intimately connected with the daily work than is the case at present. As it is now the subjects are chosen too late and often do not grow out of the daily work or daily needs, whereas if we all were alert for problems all the time the preparation for these meetings would be continuous. Every case that is studied should be looked upon from the point of view as to whether it offers anything that may be brought up at these meetings in connection with other cases observed before. This will broaden and revive the interest of every one and tend to bring the study of each case more to a focus, while it should not increase the work materially, but rather lead it into more accurate and more profitable and broader channels. More than anything else that can be done at the present time, it would tend in the direction which those who have shaped the medical work in the hospitals had in mind, namely, in the direction of a progressive advance in the work of the hospitals. Let these meetings then be a part of the comprehensive plan of co-operation of work, at which the work is brought to an issue so that it is not buried in our records without being allowed to influence sufficiently our further studies and our further conduct in the care of the patients. The results of one hospital are often not sufficient to bring out certain points, while an extensive co-operation will do a great deal more. In order to do this we must, as I have said, have definite topics to work on. These will undoubtedly offer themselves when we are fairly well started in the work. Here and there excellent studies have been made in the past few years, and have been reported at the meetings, but more initiative and further systematization and more aimful collection is needed. When we are in the habit of looking at cases from such a research point of view, then the staff meetings may, and naturally will, assume to a certain extent the function of a preliminary selection of problems, and an additional interest will be attached to them. In order to show what might be done, I have given in my paper to the superintendents a brief survey of the field, with suggestions for problems which might be taken up in such a general scheme of investigation. Since the dates and places of our inter-hospital meetings

Psychiatric Institute — Annual Report of Director

have been, and always will be, fixed for a year in advance, the time for preparation is sufficiently long.

RESEARCH WORK OF PSYCHIATRIC INSTITUTE

The research work of the institute is well set forth in the special reports from the pathological laboratory and the clinical department of the institute.

The *anatomical laboratory*, the work of which is reported by Dr. Dunlap and Dr. Lambert, receives from the State hospitals (1) cases which are of special interest; (2) cases in which the hospitals desire the assistance of the institute; (3) cases which lend themselves particularly well for the study of brain anatomy; (4) cases of gross brain lesions in which, besides the general mental symptoms, more localizable symptoms have occurred. Reports of these cases are sent to the hospitals, often with illustrations and sections, and as has been stated, an extensive report of groups is made at the inter-hospital meetings, particularly for those cases sent by the hospital in which the meeting takes place. At the same time all these cases serve as a basis for the studies of the institute laboratory, and for some time, including also the period covered by this report, especial attention has been paid to atypical cases of general paralysis, to brain syphilis, arteriosclerosis and brain tumors. In this connection it is a pleasant duty for us to acknowledge the spirit of co-operation on the part of the hospitals, in supplying such material as was particularly asked for in connection with the elucidation of these problems. Considerable attention is also paid, and will be paid, to the correlation of gross findings in the brain, with their more or less localizable disorders, such as aphasia, agnosia and apraxia, both from the clinical and from the anatomical point of view. The cases available all over the State for the purpose of such study are fairly numerous, and the material thus far worked up at the institute quite considerable and has been the basis of several very valuable contributions by Dr. Meyer. Even if one does not agree with a simplifying localization-psychiatry, these studies of the more localizable disorders are important to psychiatry as a whole, to say nothing of the fact that they are not infrequently associated

Psychiatric Institute — Annual Report of Director

with, or form a part of the more diffuse disorders. It is in order to insure careful observations of the clinical facts in the hospitals that special emphasis will be laid on the study of aphasia, agnosia and apraxia in the next course. We shall, moreover, attempt to get together the records of these cases from the State hospitals, in order to assist the hospitals in their observations, and to suggest lines along which special cases should be further examined or gaps filled out. In this way it is to be hoped that more and more satisfactory studies will be made, which can then be correlated with careful studies of the brain in serial sections undertaken at the institute. It is also hoped that it will be possible, at least in some of the cases, that a member of the institute may be able to personally help in the examination of these conditions in other hospitals.

In the *clinical department*, which is divided into a service for organic cases and one more for functional disorders, the problems which have been uppermost, differed of course in the two branches. In the organic service, as will be seen from the report of Dr. Henderson, special emphasis was laid upon the important topic of brain syphilis, its differentiation from general paralysis and other disorders, and upon the study of atypical cases of general paralysis. Lumbar puncture and the study of the chemical and serological properties of the cerebro spinal fluid, were done as a matter of routine. In the department of functional disorders, special attention has been paid to the psychological mechanisms of the diseases, not only in dementia praecox and the conditions related to it, with a view of obtaining a better insight into the origin and structure of the disorder, but also in the cases of manic-depressive insanity. Here it was found as shown by Dr. Campbell that what is commonly called a purely endogenous origin of these disorders, by which we mean that no obvious cause can be found, is after all a very relative concept, and that a careful analysis may reveal very important facts, hidden at first, which show that the reaction does not really come out of clear sky, but may have a traceable origin. It is obvious that in this direction lies an important field, seen at present in outline only, in which a reasonable prophylaxis of these cases, which are characterized

Psychiatric Institute — Annual Report on Clinical Work

by their repeated attacks, can be hoped for, as Dr. Campbell indicates in his report.

Psychological department.—Connected with the clinical studies and the analysis of symptom pictures, as indicated and as exemplified in the special report from the clinical department, is that analysis of symptoms which aims less at their psychogenic interpretation than at a clearer definition and finer differentiation. It is a study in which special laboratory methods are required. This is unquestionably an important and promising field, but one into which it is difficult for the clinician to enter extensively, considering the other lines of inquiry which demand his attention. It is, therefore, necessary to have a department in connection with the clinic, in which work is devoted to this side of psychiatry. Such work is best done by a psychologist who is in constant contact with the clinicians, so that the formulation of the problems and the devising of methods for the study of these problems can be carried out with united forces. Such a department is about to be established and Dr. F. Lyman Wells, who is not only a psychologist but who has had training in psychiatry as well, has been appointed to take charge of this work.

In closing I wish to acknowledge my indebtedness to the Commission in Lunacy for their kind support, and to my colleagues at the institute for their valuable co-operation. I also desire to express my appreciation for the uniform kindness with which I have been received in the hospitals, and the spirit of co-operation which has been shown everywhere.

Very respectfully yours,

AUGUST HOCH,

December 20, 1910.

Director.

REPORT OF THE CLINICAL WORK**FEMALE SERVICE**

By C. MACFIE CAMPBELL, M. B., Associate in Clinical Psychiatry.

During the past year one hundred and one female patients have been admitted directly into the clinical service of the Institute.

Psychiatric Institute — Annual Report on Clinical Work

The following table gives the diagnostic grouping of the cases:

A. SYMPTOMATIC-PROGNOSTIC TYPES

1. <i>Manic-depressive Insanity</i>	25
Manic attack.....	11
Depressed attack.....	9
Mixed attack.....	4
Circular attack.....	1
Allied to Manic-depressive Insanity.....	8
2. <i>Dementia Praecox</i>	21
Allied to dementia praecox.....	4
3. <i>Paranoic condition</i>	9
4. <i>Depressive hallucinosis</i>	1
5. <i>Depression not sufficiently differentiated</i>	3
Unclassified	4

B. DISORDERS ETIOLOGICALLY CHARACTERIZED

1. <i>Psychoses with more or less definite brain disease:</i>	
General paralysis.....	2
Brain tumour.....	1
Atherosclerotic brain disease.....	2
Senile psychosis.....	1
Cerebral syphilis.....	1
2. <i>Psychoses due to intoxication:</i>	
Alcoholic psychosis.....	4
3. <i>Infective-exhaustive psychosis</i>	3
Allied to Infective-exhaustive psychosis.....	2
4. <i>Epileptic psychosis</i>	2

C. CONSTITUTIONAL DISORDERS

Constitutional inferiority.....	2
Constitutional psychopathic state with hysteroid features...	2
Hysterical psychosis.....	1
Obsessional insanity.....	2
Not insane.....	1

Psychiatric Institute — Annual Report on Clinical Work**MANIC-DEPRESSIVE INSANITY AND ALLIED PSYCHOSES**

In the following table the number of attacks of the patients is shown:

Admitted in the first attack.....	7
Admitted in the second attack.....	7
Admitted in the third attack.....	3
Admitted over the third attack.....	8

Manic-depressive insanity, as a symptomatic-prognostic group, has been the subject of numerous studies in recent psychiatric literature. The symptomatology has been defined in stricter terms, the individual symptoms have been subjected to a careful analysis, atypical clinical pictures have been made clear through being resolved into their fundamental symptoms. The relation of the group as a whole to other large groups has been studied extensively; the kinship of certain paranoic conditions of the querulant type to cases of chronic mania has been established; on the other hand the relation of manic-depressive insanity to the whole group of constitutional affective anomalies has received much attention. These studies have contributed much to our knowledge of the constitutional basis on which the psychosis develops, of the symptomatology and its prognostic significance, and of the wide variations possible within this large group.

In the clinical service of the Institute during the last year more attention has been given to another line of investigation. The endeavor has been made to make a more thorough study of the factors which in each individual case have determined the onset of the attack. The aim has been to understand the psychosis as the resultant of definite forces and not to rest content with the reference of the attack to a constitutional basis; a thorough analysis of the mental constitution in the individual case forms, of course, a necessary and important step in such an investigation.

The forces which determine the onset of an attack of manic-depressive insanity are not always on the surface, and it is frequently necessary to investigate the presence of undercurrents of high emotional value, which do not express themselves in a free and direct manner.

Psychiatric Institute — Annual Report on Clinical Work

(Following this introduction Dr. Campbell quotes briefly several illustrative cases showing how an attack may represent the reaction, more or less intelligible, to a definite set of circumstances, and why an attack need not be considered merely as an unexplained explosion of a somewhat unstable emotional constitution. These cases are of great interest and value from a medical standpoint, but, as they deal with very intimate and private relations of life to some extent, they are omitted from this annual report. Physicians who desire it can obtain a copy of the completed report of the Psychiatric Institute which contains Dr. Campbell's valuable contribution, under the title of "Report of the Clinical Work," with the illustrative cases detailed in full as they have been reported by Dr. Campbell, and which, as is stated, have been omitted here.)

CASES PRESENTING DIFFICULTY OF DIAGNOSIS BETWEEN MANIC-DEPRESSIVE INSANITY AND DEMENTIA PRAECOX

In several cases the clinical picture has shown both well-marked manic features and symptoms of dementia praecox.

T. M., referred to on page seven of the annual report for the year 1907-8, is still in the hospital. She continues to be keen, alert and self-assertive; she frequently plays on words; she has had occasional episodes of mild elation. On the other hand her utterances are frequently extremely difficult to interpret; she has shown a tendency to the continual repetition of the same phrases; her conduct is extremely bizarre; she writes in the air, kneels on the floor before the door and makes movements as if writing with her nose; she frequently appears to react to hallucinations, but she will never answer questions on this point. It is now more than two years since the onset of the psychosis and the diagnosis is not clear.

In the case of another patient (R. G.), a girl of 23, the peculiarity of her utterances and her somewhat constrained and affected behavior aroused suspicion. For several months the patient has been in a stupor; she is mute, uncleanly, requires to be spoon-fed. She has, however, a rather amused expression, an

Psychiatric Institute — Annual Report on Clinical Work

observant glance; she occasionally sings and at times shows evidence of playfulness.

In another case the diagnosis of dementia praecox, paranoid form, was previously made in another hospital. The patient (A. A.), a woman of 42, has now been under observation for a year; she is mildly elated, smiles very frequently, occasionally laughs; she shows no over-activity as a rule, rarely speaks spontaneously; her talk shows a marked tendency to drift along the lines of superficial associations. During her residence in the hospital she has had little episodes of exhilaration with slight over-activity and in her talk she has shown well-marked flight of ideas. She could not be brought to discuss in a serious manner the onset of the psychosis. The patient had been in another hospital from March to September, 1909; during that period she had shown some emotional instability, was rather quiet, laughed easily; she talked of having been persecuted previous to admission, and seemed to have had hallucinations. The patient had been admitted after an excited episode and on discharge she had a short period of exhilarated behavior.

Thus the patient has had several episodes of fairly typical manic nature and for more than a year has presented a mixed manic picture. On the other hand the onset of the psychosis was described as insidious, covering a period of six months, during which the patient claimed that she heard the neighbors talking about her; at home she had stopped up the cracks in the floor, as she insisted that chloroform was being blown into her room.

In view of the onset of the disorder and the prominence of the morbid ideas, which were out of proportion to the general disorder of the patient's activity, the outlook in this case is considered to be uncertain.

DEMENTIA PRAECOX AND PARANOID CONDITIONS

The work on this group has been carried on along the lines, which have been given in some detail in the last two reports, and further material has been accumulated to strengthen the belief in the importance of internal conflicts in the development of these disorders. Both in the group of dementia praecox and in

Psychiatric Institute — Annual Report on Clinical Work

the paranoic conditions, cases were analyzed in which the symptoms of the psychosis could be traced to the underlying conflicts and experiences. In the well-marked cases of dementia praecox frequently no analysis could be made, owing to the negativistic attitude of the patient.

INFECTIVE-EXHAUSTIVE PSYCHOSIS

Two of the cases in this group ran a fatal course and in both cases the autopsy threw little light upon the condition.

M. N., a widow 44 years of age, had six months previous to admission some obscure illness, which confined her to bed for over three months. She complained of her back and her feet and had a short cough. For several weeks she was better and then began again to make the same complaints. The patient was troubled with diarrhoea for several months previous to admission. For a few weeks before admission she was restless, thought that devils were around her, talked to imaginary people; at night she was more disturbed than in the day time. At times she was disoriented.

On admission to the hospital the patient was extremely emaciated; she showed some asymmetry of the chest; her mouth was very foul; there was no evidence of any disorder of the internal organs; no neurological symptoms. The patient uttered peculiar fantastic delusions as to her body and as to the environment; her talk was drifting and semi-delirious in character; she was confused as to time and place and could only give a mixed-up account of her life with many discrepancies and contradictions. At times she was conscious of being mixed up and said, "I don't know what I am talking about sometimes." The patient only lived fifteen days after admission to the hospital. During the last week there was pronounced diarrhoea. Not even during the terminal days was any twitching or rigidity observed. The autopsy failed to disclose any adequate cause for the fatal termination. The thyroid gland was very small. In the cerebral cortex several of the cells showed the picture of axonal reaction.

The other fatal case was that of a woman of 40 (M. B.), who for seven years had been working steadily as a domestic servant

Psychiatric Institute — Annual Report on Clinical Work

and lived an uneventful life. About three weeks before admission she became sleepless and nervous and a few days later she had fever and shivered. Nine days before admission she walked aimlessly about, took no interest in house affairs, thought that people were after her. She then became delirious and did not know where she was; she thought that people were pouring water on her; she failed to recognize her relatives. On admission she only made a few fragmentary delirious remarks. She was uneasy and appeared to react to hallucinations. She was very well nourished; no disorder of the internal organs could be made out; her temperature on admission was 101 degrees. Albumin in the urine without casts. There was nothing to suggest an alcoholic condition. The patient had an infected finger which was opened and dressed and ran a satisfactory course. She quickly became torpid, required to be tube-fed, showed no sign of becoming any clearer; although the heart and lungs and abdominal organs appeared to be in good condition, she steadily grew weaker; the cerebrospinal fluid showed 4 to 8 cells in the oil immersion field. The patient died nine days after admission. The autopsy revealed no adequate cause for the delirious condition nor the fatal course.

The third case ran a favorable course. The patient (L. F.), a woman of twenty-six, had been sick for four months previous to admission. She had been in a general hospital with an attack of articular rheumatism; she made a slow convalescence and several weeks before admission she began to suffer from headache, was sleepless and felt depressed. At times she thought that she was dying; at times she talked of doing away with herself. One night she said that she was dying and was therefore taken to Bellevue Hospital. There she was noted as dull and confused.

On admission to the clinical service of the Institute she was in a profound stupor, in a state of complete relaxation, her mouth open and her eyes half closed. The patient reacted a little to pin pricks; she winked if feinted at; otherwise there was no evidence of consciousness.

Physically, she was much emaciated and flinched when the left elbow was moved. There was no disorder of the heart nor lungs. Her temperature was slightly over 100 degrees for the first three days and then became normal.

Psychiatric Institute — Annual Report on Clinical Work

The patient gradually came out of the stupor, was then suspicious and apprehensive, thought that she heard her children calling; she was very suspicious of the food. She complained of dizziness and of not being able to see straight. Two months after admission she had made great improvement, although at times she still felt confused and nervous. The events of the psychosis appeared like a dream to her. At this period the patient began to gain at the rate of five to six pounds a week and three months after admission she was in normal health. She was discharged, having made an excellent recovery.

CONSTITUTIONAL INFERIORITY

Two of the patients had shown well-marked intellectual and emotional defects from childhood and had never been able to take up any occupation. In both cases the family circumstances were rather unfortunate; each patient, over thirty-five years of age, had developed rather silly and ill-founded matrimonial ambitions, and owing to the difficulty involved in her management was sent to the hospital. A certain amount of attention given to the situation at home enabled one to discharge the patients after a short residence in the hospital, and the after-care agent was of valuable assistance to one patient, whose relatives were incapable of adequately grasping the situation.

Two cases suffered from a psycho-neurosis in which obsessions played the central role. In the first case psycho-analysis enabled one to understand to a large extent the development of the psychosis and to direct the treatment. In the second case, a girl of fifteen, the general mechanism of the psychosis could be seen, but the patient gave no spontaneous associations; it was not possible to discover the various steps in the development of the disorder.

Another patient presented a psychoneurosis in which obsessive ideas were a prominent feature. The case has been referred to in some detail in the *State Hospitals Bulletin*, May, 1910, page 6, Case, M. G.). The patient improved so much that she was able to leave the hospital; for the last six months she has been able to look after herself and during two months was matron of a home.

Psychiatric Institute — Annual Report on Clinical Work**PSYCHOSES ASSOCIATED WITH ORGANIC NERVOUS DISEASE**

A case of brain tumor was of special interest inasmuch as it presented an agraphia of unusually pure form. An absolutely pure agraphia probably only exists as a hysterical symptom. The cases of pure agraphia, which have been reported, have usually been complicated with aphasic symptoms or apractic symptoms. In 1899 Gordinier published a case of frontal tumor with agraphia; the patient showed no aphasic symptoms and was able to read perfectly. Gordinier used his case as an argument for the presence of a writing center at the base of the second left frontal convolution. The tumor, however, although it only appeared at the surface in this region, was of considerable extent and was of doubtful localizing value. Similarly in the case to be presently referred to the tumor was of too great an extent to be of much localizing value. It was a cystic tumor which separated the first and second frontal convolutions on the left side; the mesial aspect of the left hemisphere bulged inwards and produced a corresponding depression in the other hemisphere. The cyst was of echinococcal origin.

The patient (G. P.), a woman of fifty-five, five years before admission had occasional attacks of unconsciousness; these attacks ceased after one year. During the first part of 1910 she was rather dull; she talked little and complained of headache; at times she appeared to be somewhat confused and to have difficulty in understanding what was said to her; she would shake hands for a rather unusual length of time; she neglected the house, ceased to care for herself and was finally certified as insane. On admission the patient showed a dull, torpid state with no abnormal mental trend; she admitted that she was somewhat mixed up; she was unable to do simple arithmetic.

Physically: The right side of the face was slightly weaker than the left; no difference in the strength of the two hand-grips was observed. Her speech was defective; she slurred and transposed syllables and sometimes was unable to finish a word. Her writing was markedly defective; she could not write her name correctly; she began her first name well, but repeated several of the letters, then finished it almost correctly; on a second attempt

Psychiatric Institute — Annual Report on Clinical Work

she could not write the last syllable of her first name. The word hospital was rendered by *ka*, followed by a series of *n*'s and by a meaningless termination. No sensory defect could be made out. The patient, therefore, showed a writing defect which was not explained by any gross sensory or motor affection, nor by the presence of either a sensory or a motor aphasia, nor was it part of an apraxia. The other phenomena of a motor nature were a tendency to rhythmical movements of the right hand and a well-marked dysarthria. During the further course of the disorder the clinical picture became more complicated; right-sided symptoms became a little more prominent and the general level of the patient's mentality varied considerably; the patient later showed occasional difficulty in finding immediately the correct name for an object and was unable to carry out some slightly complicated commands, but the agraphia always remained out of proportion to the other features of disorder.

Another patient in this group (M. M.), a case of pseudo-bulbar paralysis with right-sided hemiplegia and hemi-chorea or hemi-athetosis, was referred to in a previous report on her first admission.

One case of cerebral lues was received on the service. The patient, a girl of 25, had received her infection about the age of 14. At the age of 24, about one year before admission, she had a transitory feeling of numbness in her right hand; shortly after this she had an attack, the exact nature of which was not known; she herself stated that she was suddenly unable to speak or to move either arm; this lasted a few minutes, she was then able to walk home. During the following winter she claimed that she had numerous attacks, but none of these were observed by her friends; she became steadily more inefficient. On admission to the hospital, the patient realized the nature of her sickness, she was depressed over her situation; her memory was defective; her accounts of the period of her sickness varied from time to time. She was fairly well nourished, with no gross motor nor sensory defect. On the left side the knee jerk and the Achilles jerk were almost impossible to elicit, they were present on the right. The

Psychiatric Institute — Annual Report on Clinical Work

plantar reflex was flexion on the left side, doubtful on the right. Marked tremor of the facial muscles, tongue and fingers. The speech and writing showed tremor, but no distortion. On a later examination the writing showed marked distortion. The pupils were dilated and unequal, they did not react to light and reacted poorly on accommodation; the fundi were normal. The blood and cerebro-spinal fluid gave a positive reaction to the Wassermann (Noguchi) test. The cerebro-spinal fluid showed a marked lymphocytosis.

Throughout her stay in the hospital the patient has shown an increasing irritability and the clinical picture has received a functional coloring from her somewhat affected and dramatic behavior. She became gradually less accessible and her talk became limited to profane utterances; she continued to give evidence of realizing clearly her pathetic condition.

A course of mercurial inunctions caused an improvement in the patient's condition. Recently .5 grams 606 has been given to the patient. It is too soon to give an opinion on the effect of this injection. The patient, however, has shown no bad effects and has improved slightly since the injection.

GENERAL PARALYSIS

One case was of interest owing to the atypical course; the other case had spent many months in another hospital with a diagnosis of Involution Melancholia. The latter patient (M. S.), a widow of 47, in 1909 began to have ideas of unworthiness, neglected her personal appearance, talked about the house being on fire, behaved somewhat oddly. After a few months at home she was taken to a hospital; there she was extremely depressed and gloomy, tried to commit suicide, thought that the world was coming to an end, had ideas of unworthiness. After six months in this hospital she was transferred.

The patient on admission uttered very depressive ideas, but smiled in a resigned way. Her attitude was characterized by placidity rather than by agitation. Her memory showed no discrep-

Psychiatric Institute — Annual Report on Clinical Work

ancies, but it was impossible to get her to give a statement of the onset of her symptoms. Instead of giving a definite answer to a definite question she would give a most general answer. She showed a rather striking inability to do simple subtraction and was quite unable to grasp the point of a simple story.

Physical condition: A well nourished woman with active deep reflexes; general diminution of pain sense; slight tremor of fingers and tongue; defective speech; marked distortion of written test words; marked lymphocytosis of the cerebro-spinal fluid with positive Wassermann (Noguchi) reaction. One pupil reacted somewhat sluggishly to light.

The first case (I. T.) had been previously admitted to the hospital in 1899. She was then excited, with delusions of grandeur and hallucinations of sight and hearing. She intended to build a hospital and to give each of the physicians a beautiful home. Her knee jerks were exaggerated; her tongue was tremulous; she stammered in her speech. The pupils were unequal. After ten months in the hospital she showed no mental symptoms except a certain abstraction, and was discharged. After discharge she was a little forgetful and not up to her previous level, but was an efficient housekeeper and had three more children.

In 1906, after the death of a child, she showed pronounced mental symptoms for about three weeks. She became extremely religious. In March, 1908, after the death of a new-born infant, she again had well marked mental symptoms with religious coloring. During 1909 she became very forgetful. During the three weeks before admission she had lost herself five times.

On admission the patient was a well nourished woman with active knee jerks; the pupils were slightly unequal, reacted very faintly to light and defectively on accommodation. The speech showed hesitation, but no tremor nor transpositions; the writing showed occasional transposition of letters. There was tremor of the tongue, none of the fingers. The cerebro-spinal fluid showed 4 to 8 lymphocytes in the oil immersion field; the butyric acid test was positive. The fluid was twice examined by the Wasser-

Psychiatric Institute — Annual Report on Clinical Work

mann method and Noguchi's modification, but gave a negative reaction. The patient showed a placid good nature, although she said that she had been persecuted dreadfully by those around her talking of her being crazy. She showed no megalomaniac trend; she seemed to be perfectly contented with her environment. Her memory was defective and her story of her life showed many inaccuracies and discrepancies; her conduct showed very marked deterioration. She was quiet, placid and lazy; she stole everything eatable and wearable which she could get, but calmly denied the thefts. She soon became uncleanly in her habits.

EPILEPTIC PSYCHOSIS

The two patients in this group illustrate the heterogeneous nature of the cases which are brought together under the symptomatic diagnosis of epilepsy. K. M., a woman of 40, had had epileptiform seizures, both grand mal and petit mal, from the age of 30. She was admitted to the hospital owing to an episode of confusion following an attack. The right side of the face was slightly weaker than the left; the deep reflexes were exaggerated. The speech was occasionally a little slurring, but test words were spoken without any distortion. The pupils reacted well, but were slightly irregular; there was slight nystagmus. The cerebrospinal fluid showed a definite lymphocytosis with negative Wassermann (Noguchi) reaction; the butyric acid test was positive.

The patient was somewhat hazy and confused, a little suspicious; her memory was quite intact. She gave no history of infection.

In this case the symptomatic diagnosis of epileptic psychosis was not considered as giving adequate expression to the physical signs present.

In the second case it was extremely difficult to come to a definite conclusion as to whether one had to deal with a psychogenic disorder or with a so-called idiopathic epilepsy.

Psychiatric Institute — Annual Report on Clinical Work

MALE SERVICE.

By D. K. HENDERSON, M. B., ASSISTANT PHYSICIAN.

The patients admitted into the male service during the past year have been grouped as follows:

Dementia paralytica	34
Cerebral syphilis	10
Psychosis accompanying other nervous diseases.....	9
Senile dementia	2
Alcoholic psychosis	8
Traumatic psychosis	1
Epilepsy (idiopathic)	1
Imbecility	1
Depression insufficiently differentiated.....	2
Paranoid condition	1
Manic-depressive insanity	1
Unclassified	1
Not insane	1

72

DEMENTIA PARALYTICA

Of the 34 cases included in this group, 24 have been of the cerebral and 9 of the tabetic type; two of the cases have shown focal symptoms. A definite history of syphilis was obtained in 26 cases; in 22 of these cases we were able to get an accurate account of the date of infection and of the onset of the mental symptoms; the average interval elapsing was 16 years, the shortest being 5 and the longest 35 years. Lumbar puncture was performed as a routine procedure, and, with one exception, a definite pleocytosis was obtained.

The case which did not show a definite pleocytosis had also a negative Wassermann reaction with his cerebro-spinal fluid, but a positive reaction with his blood serum; the cell count showed 5 cells per c.m.m. The patient was a man 44 years of age, who had always been exceedingly alcoholic and had an attack of delirium

Psychiatric Institute — Annual Report on Clinical Work

tremens in 1905; his history showed that previous to admission he had had a series of convulsive spells following a period of excessive drinking. During his hospital residence he has been elated, euphoric, has expressed numerous grandiose ideas, and has no realization of his condition; his memory for both remote and recent events is fairly good, but in giving a consecutive statement of his life several contradictions have occurred.

His pupils are slightly irregular, but react well to light and on accommodation; speech shows sticking and slurring; writing shows omission of letters; tendon reflexes are slightly exaggerated. The case is a somewhat difficult one, but we feel justified in grouping it as a case of general paralysis on account of his marked euphoria and impairment of memory and on account of his speech and writing defects.

Two cases referred to in the report of the previous year (page 42) have come to autopsy. One of these cases (F. S.) had shown several traumatic features associated with physical and mental signs of general paralysis. Examination of the brain revealed changes characteristic of general paralysis and also several well-marked traumatic lesions, especially in the region of the olfactory tracts.

The other case was the one referred to as a case of general paralysis with double optic atrophy and exaggerated tendon reflexes. At autopsy the case turned out to be one of tumor of the hypophysis.

The patient was a man 40 years of age, who gave a history of syphilitic infection at the age of 18; 5 years previous to admission, following an attack of malarial fever, he gradually lost the sight of his left eye, and two years later became blind in the right eye; there was no history of headaches, dizziness or vomiting. During his hospital residence he presented a picture of apathy and drowsiness, mild euphoria, defective memory, and some date discrepancies. Lumbar puncture showed a marked pleocytosis, positive globulin reactions and Wassermann (Nogouchi) reaction positive, both with cerebro-spinal fluid and blood serum.

It was recognized that exaggerated tendon reflexes and double optic atrophy formed a rather unusual combination, but we felt justified in grouping the case as one of general paralysis on ac-

Psychiatric Institute — Annual Report on Clinical Work

count of the absence of the more common tumor symptoms and especially on account of the findings in the cerebro-spinal fluid. In looking back at the case in the light of the autopsy, we readily see that more attention should have been paid to the apathetic, drowsy condition, and possibly to the development of the eye condition, but in regard to this last the misleading feature was the history of blindness coming on almost immediately following an attack of malarial fever.

One case at present in the hospital, who has a double optic atrophy, had quite active tendon reflexes on admission, but during his hospital residence they have disappeared and cannot now be elicited even on reinforcement.

A few of this year's cases may be briefly referred to.

E. M., 37 years of age, laborer, on admission, was elated, over-talkative, had a well-marked feeling of well being; he was somewhat disoriented; his memory was poor for both recent and remote events, but he did not express any absurd or grandiose ideas; he did not realize that there was anything wrong with his mind, but said spontaneously, "I am forgetful." He complained of headaches, and dizzy spells, and stated that he had had syphilis 17 years ago, for which he had received mercurial treatment for 8 weeks.

His pupils were Argyll Robertson; speech showed no defect except occasional sticking over difficult words; writing showed no defect; knee and Achilles jerks were exaggerated; tremor of tongue, facial muscles and hands; lumbar puncture showed marked pleocytosis, positive globulin tests, and positive Wassermann (Nogouchi) reaction both with blood serum and cerebro-spinal fluid. On account of his headaches he was given a course of anti-syphilitic treatment. In the course of two months his headaches had disappeared and he improved in his general mental condition. Later he had a series of convulsive spells limited to the right face at first, and then involving the right face, arm and leg; he improved for a day or two but remained in a semi-comatose condition. As a last resort he was given an injection of .6 gramme, "606;" the convulsions, however, mostly of a focal nature soon reappeared, and he died one month after the injection of "606." His blood serum and cerebro-spinal fluid, examined on

Psychiatric Institute — Annual Report on Clinical Work

two occasions after the injection of "606," continued to give a positive reaction.

The history of the case showed that one year previous to admission the patient had a spell of unconsciousness with twitchings of right face; after a month he resumed work and continued to work steadily until four months previous to admission. At that time he started to complain of headaches, had dizzy spells and attacks of vomiting; this was followed by a period of marked confusion and disorientation, necessitating commitment.

This case was an extremely difficult one from a diagnostic point of view, as there was relatively little preponderance of symptoms in one or another direction to help in differentiating between general paralysis and cerebral syphilis. The case was left ungrouped but owing to the type of onset with headaches, confusion, etc., the relative absence of defect symptoms, the absence of any speech or writing defect, and the improvement under anti-syphilitic treatment, a cerebro-luetic condition was thought to be the more probable.

The autopsy showed the case to be one of general paralysis.

J. M., 54 years of age hack-driver, on admission presented a combination of Korsakoffs psychosis with dementia paralytica. He had double wrist and foot drop, tenderness on deep pressure of calf muscles, and marked exaggeration of the tendon reflexes; the pupils reacted promptly to light and accommodation; his speech and writing showed marked distortions; tremors of the tongue, facial muscles and hands; lumbar puncture showed a pleocytosis; positive globulin reactions, and positive Wassermann (Nogouchi) reaction with the blood serum and cerebro-spinal fluid.

He was dull, indifferent, tended to misidentify those about him, was easily led to confabulate; he was disoriented for time; his power of retention was very defective, and his memory was defective, both for recent and remote events.

The polyneuritic symptoms rapidly disappeared, and at the end of a week he could not be led to fabricate and no longer misidentified those around him.

He now is seen constantly reacting to both auditory and visual hallucinations, expresses numerous absurd, grandiose ideas, and

Psychiatric Institute — Annual Report on Clinical Work

at the same time has developed a fairly well-marked nihilistic trend.

This case was very similar to the one reported last year (J. McK., page 44), who also showed a polyneuritis associated with dementia paralytica.

The following case was one which presented considerable difficulty from a diagnostic point of view in differentiating between general paralysis and cerebral syphilis.

G. P., 42 years of age, wood carver, $2\frac{1}{2}$ years previous to admission had an apoplectiform attack, causing a left-sided hemiplegia; following this he had an excited, slightly megalomaniac episode and behaved in an outrageous way toward his wife and children.

On admission he was affable, was pleased to talk, said that he felt quite well, that there was nothing wrong with him, boasted of his capabilities.

His memory showed very many glaring date discrepancies; he had no realization of his condition.

He gave a history of syphilitic infection when 19 years of age.

He presented residuals of a left-sided hemiplegia involving the face, arm and leg; Argyll Robertson pupils; tremor of tongue; no speech or writing defect. During his hospital residence his condition remained unchanged. He was recently discharged by order of the court.

In such a case as this a definite diagnosis appears to us at present to be quite impossible. His change in conduct and disposition might be explained as a sequence following the attack of apoplexy due to an endarteritis obliterans and associated with this we would mention the absence of facial tremor and the intactness of his speech and writing. On the other hand we can't help emphasizing the long interval between the date of his syphilitic infection and the onset of the left-sided hemiplegia, the pronounced ethical defect, the slightly grandiose trend, the glaring date discrepancies, and the Argyll Robertson pupils.

For the present it is thought best to hold the diagnosis rather in suspense, although general paralysis is the more probable.

Psychiatric Institute — Annual Report on Clinical Work

CEREBRAL SYPHILIS

The ten cases included in this group form an exceedingly interesting series. In all of these cases the onset of the mental symptoms has been relatively acute, has usually been preceded by subjective complaints of headaches, dizziness, etc., and followed by a period of confusion with some disorientation. One rather striking feature has been the mild euphoria which most of the patients have exhibited.

In nine of the cases a definite history was obtained of syphilitic infection, and the remaining case gave a history of gonorrhea. The average interval between the date of infection and the onset of the mental symptoms was four years, the longest interval being fifteen years and the shortest five months.

One case was discharged as recovered; two have shown some improvement; four remain unimproved; three died; autopsies were performed in the three cases that died. The cases will all be briefly referred to.

C. T. S., 47 years of age, printer, had a history of syphilitic infection five months previous to admission; for two months after his initial infection he was treated by a quack, and then for the next three months—up until the time of his admission to the hospital—he received mercury and potassium iodide internally and mercurial inunctions twice daily, so that when admitted he was quite salivated. In spite of this treatment he got confused, at times complained of headaches, was somewhat forgetful, but was able to work up until two weeks previous to admission, when he had a series of six convulsive spells.

On admission he presented a dull, confused, untidy appearance; did not seem to realize or take any interest in his surroundings; wet and soiled himself. When roused and urged to answer he co-operated fairly readily and replied relevantly; he was slightly euphoric, said that he felt good, that he was happy; but did not express any absurd or grandiose ideas. He was disoriented for both time and place, and gave a confused account of the events immediately preceding admission; his power of retention was very poor; glaring discrepancies occurred in giving the data of his life; he had no realization of his condition.

Psychiatric Institute — Annual Report on Clinical Work

In addition to the residuals of a right-sided hemiplegia, his sense of smell was defective; the pupils reacted promptly to light and on accommodation; hearing was impaired on both sides; speech showed hesitation and slurring over test words, but no distortion; writing showed tremor and great untidiness; tremors of tongue, facial muscles and hands; lumbar puncture showed a very marked pleocytosis; globulin reactions positive, and positive Wassermann (Nogouchi) reaction both with blood serum and cerebrospinal fluid.

During his hospital residence his condition remained unchanged; he died eleven days after admission. An autopsy was performed and showed a combination of the three types of brain syphilis—meningitis, endarteritis, miliary gummata. In some of the gummata spirochaetes were found. A fuller report of the autopsy findings will be submitted by the laboratory staff. (No. 585.)

This case was extremely interesting owing to the rapid onset of the mental symptoms after syphilitic infection, and also shows how unavailing anti-specific treatment is in certain cases of brain syphilis.

We are led to speculate in such a case as this whether such a rapid onset depends upon an individual idiosyncrasy, or whether it is due to a specially virulent type of organism.

F. C., printer, 45 years of age, gave a history of having contracted syphilis in 1904, for which he had received regular treatment for four years with mercury and potassium iodide, and later irregularly up to the time of his admission to the hospital. For three months previous to admission he had complained of severe headaches and gradually increasing dimness of vision. Two weeks previous to admission he developed an occupation delirium. On admission he was intensely salivated; was dull, confused, answered questions usually irrelevantly, but stated that he was happy; he was completely disoriented for time and place; his memory showed numerous discrepancies. Physically, he showed unequal, irregular, Argyll Robertson pupils, paralysis of the right side of the face, but no other focal symptoms; test words were pronounced extremely well without distortion or slurring; writing

Psychiatric Institute — Annual Report on Clinical Work

was illegible; tendon reflexes were equally exaggerated on the two sides; tremor of hands; pleocytosis of cerebro-spinal fluid. During his hospital residence he remained dull, drowsy, confused, disoriented, and died nine days after admission.

The clinical diagnosis of syphilitic meningitis, and endarteritis was confirmed by the autopsy. A full report will be submitted by the laboratory staff. (Case No. 626.)

This case also shows how ineffectual the usual anti-specific treatment often is in these cases.

The point of especial interest in the case was the fact that he had a paralysis localized to the right side of the face. The pathological examination has not yet been completed, but at the anterior end of the optic thalamus, there is a small area of softening adjacent to the internal capsule, just posterior to the knee, but whether it is definitely involving the face fibres cannot at the present be stated with certainty.

The next case was one in which the clinical diagnosis was extremely difficult owing to the complicated character of the etiology.

J. B., 50 years of age, bartender, showed on admission a dull, complacent state, took little interest in his surroundings, made many contradictory statements, fabricated, but grasped the nature of his environment.

He answered questions promptly, said that he felt well, that there was nothing at all the matter with him. He admitted having had auditory hallucinations; he was disoriented for time and place; made mistakes in carrying out simple calculations, and had rather defective power of retention. He presented unequal, irregular pupils, which reacted to light and on accommodation, but the range of movement was rather limited; no speech defect; writing showed no tremor, but letters were transposed and omitted; there was general muscular wasting of his arms and legs; hand grips were weak; extensor power of the feet was diminished especially on the left side; the gait was unsteady; he tended to drag his feet while walking; there was slight sign of Romberg; tenderness was elicited on deep pressure of the leg muscles; the right knee jerk was about normal, the left diminished; lumbar puncture showed a marked pleocytosis. During his hospital residence he maintained

Psychiatric Institute — Annual Report on Clinical Work

the same dull and drowsy attitude and died twenty days after admission.

From the history it was learned that he had had syphilis at a date which could not be definitely specified, and that he had been excessively alcoholic. Two years previous to admission he was hit on the left side of the head with a sledge hammer and was rendered unconscious. Immediately after this a change was noticed in his disposition; he became forgetful, complained of severe headaches, became indifferent and lost interest in things. Three months previous to admission he had a transitory diplopia; was noticed to drag his feet in walking, got very confused, said that he wasn't at home, imagined he was fishing, acted at times as though he was picking insects off his wife.

Owing to the various etiological factors — syphilis, alcohol, trauma — it was difficult to formulate a diagnosis. The signs of polyneuritis were prominent, and in conjunction with the mental picture of confusion, disorientation, and fabrication, it was thought that Korsakoff's type of alcoholic psychosis could not be ruled out. From the fact that his pupils reacted with a rather limited excursion, and on account of the fact that his writing was defective, and that he had a marked pleocytosis of the cerebro-spinal fluid, the picture was thought to be complicated by a syphilitic or para-syphilitic disorder of the nervous system. An autopsy was performed and showed a well marked syphilitic meningitis and endarteritis (Heubner's type). A fuller report will be submitted by the laboratory staff. (Case No. 550.)

J. C., 40 years of age, gave a history of gonorrhea in 1905, but denied syphilis. The case is interesting owing to the fact that he presents a mental picture similar to that seen in the Korsakoff type of alcoholic psychosis, but there is no history of alcohol in the case and he presents well marked physical signs of a syphilitic affection of his nervous system; e. g., residuals of a left-side hemiplegia, optic atrophy, pleocytosis of the cerebro-spinal fluid, positive Wassermann reaction with blood serum, but negative with the cerebro-spinal fluid.

F. J., 33 years of age, worker in a dental factory, is a case of pseudo-bulbar paralysis of syphilitic origin, the first symptom of

Psychiatric Institute — Annual Report on Clinical Work

which came on five months after syphilitic infection. The findings in the cerebro-spinal fluid were of particular interest in this case. The first lumbar puncture showed that 50 per cent. of the total cell count consisted of polymorph leucocytes, but two subsequent punctures did not show any increase of polymorphs above that normally found. We have not been able to find anything to account for such a large percentage of polymorph leucocytes.

The two following cases have presented a rather similar mental picture of the nature of an acute hallucinosis:

D. A., 21 years of age, salesman, was admitted in a dull, dazed, confused, condition; he talked in a rambling, slightly delirious way, related several dream-like experiences, and from time to time had auditory hallucinations; he was approximately correctly oriented for time and place. Owing to his dull condition and the fact that he answered questions in a low, indistinct tone of voice, little idea could be got of the state of his memory.

Physically, he complained of headaches; pupils were slightly irregular, reacted promptly to light and on accommodation, fundi were normal; right face slightly flattened; speech showed slight sticking; writing was untidy; tendon reflexes equally exaggerated; tremors of tongue, facial muscles and hands; lumbar puncture showed a marked pleocytosis; positive globulin reactions; and positive Wassermann (Nogouchi) reaction, both with blood serum and the cerebro-spinal fluid.

The onset was of the nature of an acute hallucinosis with fear reaction, two weeks previous to admission and one year after syphilitic infection. He has been treated with mercurial inunctions and potassium iodide and latterly was given an injection of .5 gramme "606," but up to the present no material change has occurred, although he appears somewhat brighter.

C. F., 42 years of age, presented a similar semi-delirious condition, which came on nine months after syphilitic infection. He rapidly improved under anti-syphilitic treatment and was discharged as recovered two months after admission.

A case of interest on account of the age of the individual and the character of the lesion is the following:

R. K., 66 years of age, porter, shows a mental condition characterized by a marked retention defect, disorientation, defective

Psychiatric Institute — Annual Report on Clinical Work

memory, especially for recent events, and a tendency to confabulate. Physically he shows residuals of a left-sided hemiplegia with hemi-ataxia and hyper-acute reaction to pin-pricks on the hemiplegic side. In addition the left eye shows signs of an old iritis; pupils react sluggishly to light; speech and writing show no defect; lumbar puncture showed a marked pleocytosis, positive globulin reactions, and positive Wassermann (Nogouchi) reaction, both in the blood serum and the cerebrospinal fluid.

In view of the association of the hemiplegia with hemiataxia and hypersensitiveness, the lesion is probably in the region of the optic thalamus, and is probably due to a specific endarteritis obliterans.

The two following cases are further examples of the difficulties experienced in differentiating between general paralysis and cerebral syphilis.

J. M., 40 years of age, grocer, had a syphilitic infection in 1900 and received treatment with mercury and potassium iodide for two and a half years. On admission he appeared bright, smiled, talked spontaneously, but his remarks were frequently indistinct and often irrelevant.

He misinterpreted the situation, thought that the physician's notes consisted of a butcher's bill and that he was in a market.

His power of retention was poor, but his memory for remote events was excellent. A few days after admission he complained about people calling him vile names and on account of this would run out of his room several times during the night and ask who had been calling him.

He was in a reduced physical condition, complained of headaches and dizziness. The pupils reacted with limited excursion to light and on accommodation; fundi were normal; speech slightly sticking but without distortion; writing untidy with some omission of letters; tendon reflexes equally exaggerated; tremor of tongue and hands. Lumbar puncture showed a pleocytosis, positive globulin reaction, and positive Wassermann (Nogouchi) reaction, both with blood serum and the cerebro-spinal fluid.

From the history of the case it was learned that for two years there had been a gradual falling off in his general efficiency and a change in his mood.

Psychiatric Institute — Annual Report on Clinical Work

He became sleepless, complained of headache, dizziness, and buzzing in his ears, and about one week previous to admission he had a delirious episode on account of which he had to be committed.

Under anti-syphilitic and general tonic treatment he has shown considerable improvement; he has gained in weight, the headaches, dizziness, etc., have all disappeared and his behavior on the ward is natural.

He is at present, however, mildly elated, the auditory hallucinations still persist, but to a much less marked extent than formerly. A second lumbar puncture has shown no decrease in the pleocytosis and the Wassermann reaction is just as strongly positive as formerly.

The subjective complaints of headaches, etc., followed by the acute onset of the delirium with confusion and auditory hallucinations is very unlike the type of onset usually seen in cases of general paralysis, but it is a type relatively common in cases of brain syphilis. His memory is excellent, he has never shown any gross defects of personality seen in general paralysis, he has a good realization of his condition, while on the physical side his speech and writing show little defect. On account of the points emphasized we would at present make a tentative diagnosis of cerebral syphilis.

J. B., 60 years of age, janitor, has during his hospital residence developed a complete left-sided hemiplegia, with a left homonymous hemianopia and diminished sensibility to pain on the left side. Previous to admission he had three attacks of unconsciousness with twitching of the left face, and just previous to commitment had an excited episode with a fairly well marked grandiose trend. He gave a history of syphilis fifteen years ago.

He now shows a general mental reduction; has difficulty in correlating dates and shows also delapidation of his general personality. In addition to the left-sided hemiplegia his sense of smell is defective, left pupil is more dilated than right, both are irregular, but react promptly to light and on accommodation; hearing is impaired on right side; no gross speech or writing defect. Lumbar puncture revealed a pleocytosis, positive globulin reactions, and positive Wassermann (Nogouchi) reaction, both with blood

Psychiatric Institute — Annual Report on Clinical Work

serum and cerebro-spinal fluid. He has had a long course of anti-syphilitic treatment, but his condition has remained unchanged.

For the present we feel justified in keeping this case among those of cerebral lues, owing to the fact that mentally he does not show any gross defects, and on the physical side there is an absence of facial tremor, his speech and writing remain intact, and his pupils react promptly to light and on accommodation.

PSYCHOSIS ACCOMPANYING OTHER NERVOUS DISEASE

The following case is one of great interest owing to the combination of a number of neurological conditions:

J. B., 53 years of age, metal polisher, was admitted in a depressed, despondent, rather irritable condition. He complained of general weakness, of flashes going through his head, said that he felt sad because people claimed that he was going to be killed, and appeared slightly apprehensive. He admitted having auditory hallucinations both during the day and at night. He was rather poorly oriented for time and place; his memory for recent events was defective, but for remote events was practically intact. He had considerable difficulty in doing simple calculations; he realized to a certain extent that his mind was disordered.

He complained of numerous head feelings — headache, dizziness, buzzing in his ears; he had a slight ptosis of the right upper eyelid; pupils irregular, reacted rather sluggishly to light and on accommodation; sticking in spontaneous speech, and considerable effort was required over test words, some of which showed distortion; writing showed tremor and distortion of words; tremor of tongue, facial muscles and hands. Lumbar puncture showed a pleocytosis; Wassermann (Noguchi) reaction has only been done with the blood serum and it gave a positive reaction.

In addition to the above symptoms the patient presents an interesting type of muscular atrophy. He complains of numbness in his hands and there is marked wasting of the small muscles of both hands, especially on the right side, where there is a fairly typical "main-en-griffe." There is an almost constant jerky tremor in right thumb and fibrillary twitchings can be elicited on percussion. There is marked weakness of extensor power of the right foot and in walking the right foot is moved in a flail-like,

Psychiatric Institute — Annual Report on Clinical Work

floppy way; Romberg's sign is quite marked. Knee and Achilles jerks are equal on two sides. Plantar response on right side usually shows a fanning of the small toes and occasionally an extensor response has been elicited. On the left side the response is flexion. Right supinator and right biceps jerks are present but diminished; otherwise no deep reflexes can be elicited in the upper extremities. The sensory examination has revealed ulnar anaesthesia on both sides, a rather indefinite band of anaesthesia round the chest, and a disorder of thermal sense over right leg from the knee down.

During his hospital residence both his mental and physical condition has remained unchanged.

Our information in regard to the development of the case is very meagre.

The patient gives a vague history of a venereal infection about thirty years ago. He is unable to say how long he has had difficulty in walking, but states that two years ago he fell on the ice and since then has experienced sensations of numbness in his hands.

His mental disorder appears to have been relatively rapid in onset.

The case is exceedingly interesting on account of the multiplicity of the neurological signs, which are probably due to a combination of processes. The slurring speech, distorted writing, sluggish pupils and pleocytosis of the cerebro-spinal fluid, associated with a mental deterioration of an organic nature, would make the diagnosis of general paralysis very probable. The atrophic condition is similar to that seen in cases of progressive muscular atrophy. The probability is that in addition to the cerebral lesion there is a combined system degeneration of the spinal cord affecting the gray matter and to a limited extent the sensory system.

The possibility of a syringo-myelia has, however, also to be considered.

E. H., carriage maker, 50 years of age, gave a history of tabes of seventeen years' duration. Two months previous to admission he became irritable and faultfinding, and later developed hallucinations, both visual and auditory, of a fearful nature. On ad-

Psychiatric Institute — Annual Report on Clinical Work

mission he was dull, drowsy, and talked in a confused, rambling, indistinct way; he had both auditory and visual hallucinations, and expressed a fear of being killed. His memory for recent events as far as could be tested was good, but he had little recollection of remote events; he gave very confused answers when his orientation was tested.

He presented all the characteristic physical signs of tabes; his speech showed no distortion. A lumbar puncture was not attempted owing to his cranky, irritable, apprehensive condition. He has been transferred to a private institution.

The character of the psychosis, namely, an acute hallucinatory disturbance with some fear reaction, and rather cranky, irritable mood is somewhat typical of the so-called tabetic psychosis. In last year's report a case was briefly referred to which was very similar to this one. (Page 45.)

The condition of the patient has remained stationary. From time to time he has outbursts of irritability and suspicion with auditory hallucinations; his memory remains intact; he calculates correctly, and there is no disorder of speech or writing.

W. C. B., an arterio-sclerotic man, fifty-eight years of age, one year previous to admission, had a stroke of paralysis, causing a left-sided hemiplegia. Since that time he has experienced a feeling of numbness in the left hand, a fairly well marked intention tremor of the left hand, and involuntary movements of the fingers of the left hand when the hand is at rest.

Mentally he is dull and apathetic.

Lumbar puncture gave a negative result. The combination of physical signs mentioned has led us to make the diagnosis of a lesion in the region of the optic thalamus on an arterio-sclerotic basis.

In this group are also included three cases of aphasia; two of the so-called sensory type, and the other a total aphasia in a patient with residuals of a right-sided hemiplegia.

ALCOHOLIC PSYCHOSIS

Four of the cases in this group showed a Korsakoffs syndrome, but three of these were atypical, in that although considerable tenderness was elicited on deep pressure of the muscles, and there was

Psychiatric Institute — Annual Report on Clinical Work

marked weakness of the extensors of the foot and toes, the tendon reflexes were slightly exaggerated. Lumbar puncture in all of these three cases has given a negative result.

None of the cases belonging to the other groups need be specially referred to.

During the year there have been twenty-five deaths and twelve autopsies.

CEREBRO-SPINAL FLUID

During the year lumbar puncture has been performed as a routine procedure, and in upwards of seventy cases the fluid has been subjected to cytological, chemical, and serological examination.

For the quantitative cytological examination the Fuchs-Rosenthal counting chamber method has been used exclusively. This method is both simple and quick, and by it we get the number of cells in relation to certain definite measurements, thereby insuring more uniform results than with the older smear method.

In all our cases of general paralysis, with one exception, and cerebral syphilis there has been a marked increase in the number of cells. Any number of cells above 10 per c. m. m. may be looked upon as a positive pleocytosis; between five and ten cells per c. m. m. doubtful; and below 5 per c. m. m. negative.

For purposes of cell differentiation the Alzheimer method has been used, but we have not as yet examined sufficient cases to warrant us making any definite statements in regard to the value of cell differentiation.

The chemical examination has consisted in using four separate tests:

1. Nitric acid.
2. Butyric acid.
3. Ross-Jones.
4. Nonne phase I.

The tests which have been of most value to us are the Butyric acid test of Nogouchi, and the Ross-Jones test. These two tests have given us positive results whenever we have had a pleocytosis of the cerebro-spinal fluid.

The Ross-Jones test is probably easier to read than any of the

Psychiatric Institute — Annual Report on Clinical Work

other tests and is performed by adding 1 c. c. cerebro-spinal fluid to 2 c. c. of a saturated solution of ammonium sulphate. The test is performed as Heller's nitric acid test is performed with urine. The formation of a white ring at the junction of the two liquids constitutes a positive reaction.

The serological examination has been conducted both with the blood serum and the cerebro-spinal fluid. Nogouchi's modification of the Wassermann reaction has been used, and the results obtained by this method have been very satisfactory.

Unfortunately, by this method, we do not seem to be able to differentiate between general paralysis and cerebral syphilis. Plaut, Nonne, and others claim that by means of the original Wassermann method they can differentiate between these two diseases, as in cerebral syphilis they practically never get a positive reaction with the cerebro-spinal fluid, whereas in general paralysis they get just as frequently positive results with the cerebro-spinal fluid as with the blood serum.

In our hands the Nogouchi modification has in several typical cases of cerebral syphilis given us just as strongly positive reactions with the cerebro-spinal fluid as with the blood serum.

One case of general paralysis, tabetic type, of thirteen years' duration, has given a negative reaction both with blood serum and cerebro-spinal fluid.

Two typical cases of general paralysis have given negative reactions with the cerebro-spinal fluid, and positive reactions with blood serum.

A detailed account of this work will be published at a later date.

**REPORT OF THE HISTOLOGICAL LABORATORY FROM OCTOBER 1,
1909, TO SEPTEMBER 30, 1910**

BY DR. CHARLES B. DUNLAP, CHIEF ASSOCIATE IN NEURO-
PATHOLOGY, AND DR. CHARLES I. LAMBERT,
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TABLE OF CONTENTS

	PAGE
I. Introductory Note.....	191
II. Numerical Table of Cases with Sources.....	191
III. Analysis of These Cases into Groups and Subgroups.....	192
i. General Paralysis, discussion.....	193
a. Cerebral type without marked focal disorders.....	194
b. Tabetic type.....	199
c. Cases with focal disorders.....	201
d. Cases with optic atrophy.....	203
e. Juvenile cases.....	206
ii. Cerebral syphilis.....	208
a. Gummatous form.....	208
b. Meningitic form.....	210
c. Endarteritic form.....	213
iii. Senile and Arteriosclerotic disorders, analysis and discussion.....	216
Senile Disorders.....	217
Arteriosclerotic Disorders.....	217
a. Without focal lesions.....	220
b. With focal lesions.....	221
1. Primary branch disorders:	
Inferior cerebellar.....	221
Superior cerebellar.....	221
Posterior cerebral.....	221
Middle cerebral.....	223
Anterior cerebral.....	230
2. Terminal branch disorders:	
Long or medullary branch disorders.....	231
Short or cortical branch disorders.....	239
iv. Tumors of the brain, cord and meninges.....	240
a. Gliomata.....	240
b. Endotheliomata.....	240
c. Lipoma and cystoma.....	240
d. Tubercular node, calcified.....	240
v. Central Neuritis.....	245
vi. Traumatic lesions.....	246
vii. Meningitis.....	248
viii. Epileptic disorders.....	251
ix. Lesions of the spinal cord.....	254
x. Miscellaneous cases.....	256
IV. Notes on the technical work of the Laboratory.....	260
V. Hospital Reports and Interhospital meetings.....	260

Psychiatric Institute — Report of Histological Laboratory

I. INTRODUCTORY NOTE

The same plan followed in the annual report for 1908-1909 has been followed in the present instance, except in that group of cases etiologically dependent upon syphilis. These cases have in part been discussed in a group by themselves instead of discussing them all under a special section in the arteriosclerotic disorders as was previously done. The histological differentiation between an arteriosclerosis of syphilitic or non-syphilitic origin is usually easy in fresh or active cases, even though the latter may have been in progress for a long time, but in certain other cases which have run a long and relatively inactive course, and have become complicated by ordinary atheromatous changes, the differentiation may become difficult or impossible; in consequence, a certain number of cases placed in the syphilitic group have to be labeled as *probably* of syphilitic origin.

II. CASES RECEIVED AND THEIR SOURCES

Utica State Hospital.....	2 cases
Willard State Hospital.....	5 cases
Hudson River State Hospital.....	16 cases
Middletown State Homeopathic Hospital.....	4 cases
Buffalo State Hospital.....	2 cases
Binghamton State Hospital.....	7 cases
St. Lawrence State Hospital.....	8 cases
Rochester State Hospital.....	0 cases
Kings Park State Hospital.....	3 cases
Long Island State Hospital.....	2 cases
Manhattan State Hospital:	
Institute service.....	10 cases
Other services.....	3 cases
Central Islip State Hospital.....	11 cases
Gowanda State Homeopathic Hospital.....	4 cases
Matteawan State Hospital.....	0 cases
Dannemora State Hospital.....	0 cases

Total from the New York State Hospitals..... 77 cases

Psychiatric Institute — Report of Histological Laboratory

Outside sources: Six cases.

Dr. Simon Flexner, Rockefeller Institute.....	1 case
Dr. Hoppe, Cincinnati.....	1 case
New Jersey State Hospital, Dr. Hammond.....	1 case
Dr. Ward A. Holden.....	2 cases
Auburn Prison.....	1 case

Total number received..... 83 cases

III. ANALYSIS OF THESE CASES INTO GROUPS AND SUBGROUPS

- i. GENERAL PARALYSIS. Seventeen cases.
 - a. Cerebral type without important focal symptoms 8 cases
 - b. Tabetic type 2 cases
 - c. Cases with important focal symptoms... 2 cases
 - d. Cases with optic atrophy..... 4 cases
 - e. Juvenile types..... 1 case
- ii. CEREBRAL SYPHILIS. Seven cases (twenty-three cases).
 - a. Gummatous 2 cases
 - b. Meningitic 2 cases
 - c. Endarteritic 3 cases
- iii. SENILE AND ARTERIOSCLEROTIC DISORDERS. Thirty cases.

Senile disorders 6 cases

Arteriosclerotic disorders.

 - a. Without focal lesions..... 1 case
 - b. With focal lesions.
 1. Basal trunk disorders..... 0 cases
 2. Primary branch disorders.
 - Inferior cerebellar 1 case
 - Superior cerebellar 1 case
 - Posterior cerebral 1 case
 - Middle cerebral..... 6 cases
 - Anterior cerebral..... 1 case
 3. Terminal branch disorders.
 - Long or medullary branches 10 cases
 - Short or cortical branches 3 cases

Psychiatric Institute — Report of Histological Laboratory

iv.	TUMORS OF THE BRAIN, CORD AND MENINGES. Six cases.	
a.	Gliomata	3 cases
b.	Endotheliomata	1 case
c.	Lipoma and cystoma	1 case
d.	Tubercular node calcified	1 case
v.	CENTRAL NEURITIS	1 case
vi.	TRAUMATIC LESIONS	3 cases
vii.	MENINGITIS	5 cases
viii.	EPILEPSY	2 cases
ix.	LESIONS OF THE SPINAL CORD	3 cases
x.	Miscellaneous cases	9 cases

i. GENERAL PARALYSIS

In this group of seventeen cases the shortest duration was about one year, the longest about five; none of the patients were beyond the sixties, the youngest was a boy of seventeen.

The groups into which the cases have been separated often contain those which might have gone into other groups with almost equal propriety. Under the *cerebral type*, for example, such cases as No. 548, with degenerations in the second and third nerves, and No. 549, an unusual case in which colloidal changes affected a few centimeters of a convolution throughout its whole extent, might have been placed with the *focal* cases. No. 564, in the tabetic group, presented a small right hemisphere, and a progressive degeneration in the left crossed pyramidal tract, and might well have gone into the *focal* group.

More attention is being given to the blood vessels supplying the more atrophic areas in the so-called *focal* cases (Lissauer's type) of general paralysis. A girdling endarteritis of a moderate grade is not unusual in general paralysis and where focal areas of cortex corresponding clearly to the distribution of a definite vessel system are involved (as in case 623), it becomes necessary to see whether a diminished blood supply to the parts may not have had as much or more influence than the so-called meta-syphilitic virus in bringing about the focal atrophy and consequent symptoms. In the case above referred to, the vessels in question looked thin and adequate.

Psychiatric Institute — Report of Histological Laboratory

ANALYSIS OF CASES

The cases have been grouped as follows:

a. Cerebral type without important focal symptoms.	8 cases
b. Tabetic type.....	2 cases
c. Cases with important focal symptoms.....	2 cases
d. Cases with optic atrophy.....	4 cases
e. Juvenile type.....	1 case
	<hr/>
	17 cases
	<hr/>

a. GENERAL PARALYSIS, CEREBRAL TYPE, WITHOUT IMPORTANT
FOCAL SYMPTOMS

Eight Cases

Nos. 551, 549, 548, 625, 587, 602, 583, 610

No. 551. *Utica State Hospital*.—A medium sized brain with slight thickening and haziness of the frontal and central pia and ventricular granulations. No focal lesions.

Typical changes of general paralysis were found, the intensity of the cortical changes was rather marked and the paracentral area was unusually involved.

The patient was sixty-six. His venereal history was unknown; he had been an excessive drinker for thirteen years. His psychosis began only about a year before death with some expansiveness and about a month later, on account of a stuporous condition and inability to talk, he was admitted to a general hospital but discharged six days later. Afterwards he was arrested and sentenced to jail, and at his own request, the stay was prolonged. When admitted to the hospital he did not know the nature of the place. He had a general convulsion the next day, followed by weakness of the right leg and ankle clonus for several days. Speech was characteristic; the knee jerks were increased; convulsions were rather frequent, and he died about three weeks after admission. Broncho-pneumonia and moderate arteriosclerosis were found at autopsy. The age of the patient, the short duration of the psychosis, the intensity of the process in the cortex, especially the paracentral lobule, with relatively little involvement of the pia, were points of interest. Used for studies in general paralysis.

Psychiatric Institute — Report of Histological Laboratory

No. 549. *Utica State Hospital*.— A rather undersized brain with diffuse atrophy; moderate thickening and grayness of the pia; swollen, whitish and translucent convolutions in parts of the left anterior central gyrus, LF_2 , LF_3 anteriorly, and some patches on the left orbital surface. Similar, but more intense changes in RF_2 , near the orbital surface; thickening and whitening of the basal arteries and abundant granulations of the ependyma.

Microscopically, there was much infiltration of the pia, and the blood vessels contained the usual elements found in general paralysis; these sometimes escaped from the vascular sheaths, and the process was very intense. In the translucent parts of the convolutions there was transformation of the tissues, including many of the blood vessels, into a colloidal mass. In parts of the transformed tissue the vessels were fairly preserved, in others the whole tissue had been affected. There was no trace of amyloid reaction in this material, and no calcareous deposits were seen.

The patient, an intemperate farmer of sixty-five (syphilis not mentioned; probable specific scar) died about two and one-half months after admission, but his psychosis had been active for about three years, with ugliness at the onset, an early convulsion, and later failing memory. Convulsions occurred again about a year after the onset; about a year before death (before his admission) there was a stroke, with resulting paralysis of the right arm lasting seven months. The face and legs were not affected. On admission there was tremor of the face, tongue and fingers, Romberg-sign, absence of pain sense; the pupils were irresponsive to light; the knee-jerks not obtained; speech was slurring; smell impaired; memory poor, and insight lacking. He could neither read nor write, although he had a common school education. Convulsions were noted from time to time. Death occurred from exhaustion and chronic cystitis. No paralysis was mentioned after admission. Used for studies in general paralysis.

No. 548. *Manhattan State Hospital, Institute Service*.— A small brain with even convolutions, wide fissures and a somewhat small right frontal lobe as compared with the left, but the right hemisphere as a whole was slightly the heavier of the two. The pia was thick, gray, rather more affected on the right, but the condition was diffuse. A small rusty spot on the under

Psychiatric Institute — Report of Histological Laboratory

surface of the right cerebellar hemisphere was the only cortical focal lesion. On horizontal section of the right hemisphere the cut surface looked normal. The optic nerves were small; the third nerves looked equal but were imbedded in a tough gray pia. The ependyma was finely uneven.

Microscopically, the cortex showed characteristic changes of general paralysis in the pia and cortex, of rather slight intensity in the latter. In the right optic nerve most of the central fibers were preserved, but many of the peripheral bundles, especially at one side, were degenerated. In the left optic nerve degeneration was almost complete. A comparison of the right and left third nerves showed many bundles degenerated in the right, while in the left no degeneration was evident.

The patient, a chemist of forty-one, had syphilis at about twenty-six; persistent total paralysis of the right third nerve was recorded about four years before death. The psychosis began about one year later, and presented a typical picture of boastfulness, megalomania, slurred speech, rigid pupils, exaggerated reflexes, tremors, speech defect, and positive lumbar puncture. After a gradual mental and physical reduction he was found, eleven days before death, unconscious in bed, and showed left hemiplegia with the tongue to the left, weakness and slight spasticity of the left arm and leg, Babinski-sign, but equal knee-jerks, hemianalgesia and hemianopsia. The left Babinski-sign persisted and he remained as above with deepening coma until death. Used for study of the cortex and nerves.

No. 625. *Manhattan State Hospital, Institute Service.*—A small brain with considerable atrophy, more especially in the lower half of the convexity, and in the left temporal lobe. Some thickening and grayness of the pia, no focal lesions. Retraction and thickening of the basal arteries, marked ependymal granulations.

Microscopically, the section showed typical general paralysis with numerous spider cells, rod cells and considerable neuroglia increase in the deeper layers. Marked colloidal calcification was found in some of the subcortical blood vessels, and in one area it extensively involved the smaller cortical vessels.

The patient, a painter of 51, denied venereal disease; he had

Psychiatric Institute — Report of Histological Laboratory

had a touch of lead poisoning about seven years before the onset of his psychosis. One year before mental symptoms appeared he became unconscious and had right hemiplegia involving the arm, leg, face and tongue, and dysarthria; his speech was poor after that, and he was unable to work. About eight months before entrance there was a second similar attack, but without loss of consciousness. His psychosis of about one year's duration began about seven months after the last hemiplegia, with a happy and rather grandiose condition, various inconsistent statements, and mixing up of dates. The pupils were at first responsive, later they were Argyll-Robertson; the knee and Achilles jerks, however, were exaggerated. There were speech and writing defects, tremors of the face, tongue and hands. There was little change until his death. Used for studies in general paralysis.

No. 587. *Hudson River State Hospital*.—The brain was of fair size, the pia was diffusely hazy and the convolutions atrophic over the frontal and prefrontal convexities. Fine granulations were present on the floor of the fourth ventricle. The cerebral vessels were free from arteriosclerotic changes.

Microscopically, the diffuse meningo-encephalitic changes present in general paralysis were found.

The patient was a hotel keeper of sixty-four, syphilis was not ascertained, but his social relations were very irregular, and there were scars on the legs regarded as specific. Five years before death his conduct was irrational, erotic, delusional, with grandiose ideas; he had unequal sluggish pupils; fibrillary tremors of the tongue, coarse irregular tremors of the eyelids and fingers; a marked speech defect; exaggeration of deep reflexes, and Romberg symptom. Mental and physical deterioration were progressive. Used for studies in general paralysis.

No. 602. *St. Lawrence State Hospital*.—A small brain with slight thickening and grayness of the pia and considerable adhesion between the lobes; moderate thickening and slight whitening of the arteries without atheroma. Granulations in the fourth ventricle. A traumatic looking lesion in RT₂ and 3 covered by slightly rusty pia.

The microscope showed much thickening of the pia, and considerable infiltration of the cortical blood vessels in the frontal

Psychiatric Institute — Report of Histological Laboratory

region with lymphoid and plasma cells. Rod cells were present in moderate numbers and cell loss was well marked in places, especially in the deeper layers of the cortex.

The patient was a woman of forty-eight, in whose history syphilis was not mentioned. She had used alcohol excessively, and also morphine. Her psychosis of about four years' duration began with neglect of work, rambling talk and irritability. Later she was happy and forgetful, but without positive elation. The pupils were small and sluggish. The reflexes were active or increased with no difference noted in the two sides. There were speech and writing defects. One general convulsion occurred a year and a half before death, with partial paralysis and rigidity of the left shoulder and wrist, less of the arm; the leg was not affected (transitory?). Lumbar puncture was positive. The clinical diagnosis was general paralysis. The date of occurrence of the temporal lesion and its effect on the course of the disease could not be determined by the data available. Death occurred from broncho-pneumonia. Used for studies in general paralysis.

No. 583. *Long Island State Hospital.*—A rather small brain with moderate thickening of the pia which had a translucent, gelatinous looking content. There was considerable atrophy, especially at the frontal poles, but no focal lesions were seen. There was marked injection of the fine vascular twigs, but little thickening of the large trunks. Granulations of the ependymal surfaces were plain.

The cortex showed well marked general paralysis with considerable architectural disorder and marked neuroglia reaction. The blood vessels were all very full. The paracentral area was less affected than the frontal. There were numerous plasma cells in the ependymal granulations. Otherwise the findings differed in no way from what might have been expected in any case.

The patient was a physician of 51, whose father and mother were insane; he himself had been intemperate, and spy-health for two years previously. Loss of memory and speech defect were the beginning symptoms; later he was violent and still later he was exhausted and inaccessible. The reflexes were increased, the pupils were not mentioned. Convulsions for four

Psychiatric Institute — Report of Histological Laboratory

days before death without recovery of consciousness. Death from broncho-pneumonia. Used for studies in general paralysis, with reference to convulsions.

No. 610. *Gowanda State Homeopathic Hospital*.—The brain weighed 1,350 grammes; the pia was thickened, turbid and slaty looking; atrophy of convolutions was moderate; the basal vessels were diffusely thickened. The histological changes of general paralysis were present, but only to a very limited degree.

The patient was a physician of 51, whose father and mother were insane; he himself had been intemperate, and syphilis was probable. A railroad injury seven years before death necessitated the amputation of the right leg; a year later after an appendectomy he became nervous and depressed, careless in dress and forgetful of his business. On admission at forty-six his memory for recent events was defective, his pupils were irregular and Argyll-Robertson, the tongue, fingers and writing were tremulous, the knee-jerks increased, and speech defective. Several fainting attacks occurred at forty-eight, and at forty-nine deterioration was very marked. There was progressive physical and mental decline. Used for studies in General Paralysis.

b. GENERAL PARALYSIS, TABETIC TYPE**Two Cases**

Nos. 564, 624

No. 564. *Manhattan State Hospital, Institute Service*.—A small brain with marked atrophy of the right cerebral hemisphere, the convolutions of which were withered and atrophic, but the upper third of the anterior central and the base of the temporal lobe were less affected. There was contralateral reduction in the left cerebellar hemisphere and in the left side of the pons. The pia was thickened and grayish-white, but not very tough. The right middle cerebral artery was rather thicker than the left, but both were moderately thickened and slightly atheromatous at the places of subdivision.

The cortex of both hemispheres showed the characteristics of general paralysis of considerable intensity on both sides, but greatest on the right. On the left the cortex was about 3 mm.

Psychiatric Institute — Report of Histological Laboratory

thick and cell loss and disorder in the layers were not striking; on the right the cortex was $1\frac{1}{2}$ to 2 mm. thick and the cell loss was marked in places. The marrow was also much reduced. The spinal cord, at the third cervical segment, showed marked progressive degeneration in the left pyramidal tract, and old degeneration in both posterior columns. Most of the fibers in the latter location were destroyed, being best preserved at the most lateral portions of the columns of Burdach. Sudan III showed a pronounced fat reaction in the affected pyramidal tract, but not in the posterior columns. There was a marked exudate in the pia consisting in the outer layers of polynuclear leucocytes and fibrin, and some lymphoid cells in the deepest layers.

The patient was forty-seven, he denied syphilis, but had led an irregular life. Ten years before admission he developed lightning pains and other signs of locomotor ataxia. His psychosis developed nine years after the tabetic symptoms appeared, at which time he became expansive and boastful, with defective memory and no insight. On admission there was slight ptosis of the left lid, unequal Argyll-Robertson pupils, absent knee and Achilles jerks, marked ataxia and tremors. Speech was disturbed and the writing was almost illegible. The pain sense was so diminished that, after a fracture of the thigh, a fragment of bone was sawed off without an anesthetic. About two years before death a general convulsion occurred, followed by left hemiplegia, hemianæsthesia and hemianopsia, with twitchings of the left arm and leg. The last note before death recorded a well marked tabetic complex with pupils and reflexes as before, residuals of left hemiplegia shown in flattening of the face, weakness of the arm and leg, occasional Babinski-sign, absence of superficial reflexes, hemianopsia, hemianæsthesia and analgesia, also paralysis of the left third nerve. He became unconscious with twitching of the right face, arm and leg on the day before death, and did not regain consciousness. Used for studies in tabes and general paralysis.

No. 624. *Manhattan State Hospital, Institute Service.*—A medium-sized brain with thickening and grayness of the pia on the anterior three-fourths of the convexity. There was considerable atrophy, perhaps slightly accentuated on the right, but no

Psychiatric Institute — Report of Histological Laboratory

focal lesions. The blood vessels were somewhat thickened, but not atheromatous, and there were fine ependymal granulations. The pia of the spinal cord was slightly thickened posteriorly.

Microscopically, the large blood vessels were almost normal with an occasional slight plaque of intimal thickening. The cortex showed characteristic changes of general paralysis, of rather slight intensity; the larger blood vessels were chiefly affected, and the cortex appeared regular and not thinner than usual. The paracentral region was fully as much affected as the frontal. There was a scattered infiltrate, composed mostly of lymphoid cells in the pia of the spinal cord, but no infiltration was seen in the cord substance.

The patient, a musician of fifty-two, had syphilis, possibly at twenty-eight, he was alcoholic, had arteriosclerosis and had given up work a year before admission. He was admitted in a condition of apathetic dementia with Argyll-Robertson pupils, absent knee jerks, headaches and dizziness, but no sensory disorders; there was Romberg-sign and tremors of the tongue, slow deliberate speech and mixing up of syllables. Ten days after admission left hemiplegia without unconsciousness or convulsions was noted and left hemianopsia, but no sensory disorder. The hemianopsia was not detected two days later, but at the end of the week was present. Thirteen days after the hemiplegia he died. Used for studies in general paralysis.

c. GENERAL PARALYSIS, WITH IMPORTANT FOCAL SYMPTOMS
Two Cases

Nos. 595, 623

(See also No. 548 in group a, and No. 564 in group b.)

No. 595. *Hudson River State Hospital*.—A large brain weighing 1,365 grammes; the pia was slightly hazy, but only very moderately thickened over the frontal and prefrontal regions. The larger cerebral vessels were quite atheromatous. The left hemisphere weighed 575 grammes, the right 620 grammes, the cerebellum 170 grammes. The convolutions of the left parieto-occipital convexity were flattened and more atrophic than on the right side, the area involved corresponded to the left inferior parietal lobule,

Psychiatric Institute — Report of Histological Laboratory

the posterior portions of LT_1 and LT_2 and $LO_{1, 2}$ and 3 . The vessels to this area showed a low grade girdling endarteritis. The microscopic changes were characteristic of general paralysis and, as usual, were greatest in the frontal convexity, but a greater poverty of nerve cells seemed to be present in the more atrophic parts of the left hemisphere.

The patient was an intemperate, single man of sixty-one, syphilis was not specified. His psychosis of eight months' duration developed gradually, associated with several apoplectic attacks, without paralytic residuals, but slight clumsiness. He was restless, often happy and smiling, emotionally unstable, toward the last noisy and violent. His pupils were unequal and Argyll-Robertson, his speech was incoherent and paraphasic. The patient was right-handed; he was unable to understand or repeat spoken language, or recognize things heard or felt; he understood occasional printed words, but not written requests, and was unable to repeat the alphabet or read aloud; writing was imperfect and limited to copying, gestures were understood, the uses of articles and colors were recognized. Used for comparative topographical studies of the cortex.

No. 623. *Manhattan State Hospital, Institute Service.*—A rather small, asymmetrical brain, with the right hemisphere 31 grammes lighter and a little shorter than the left. The pia was thickened, yellowish-white, very tough, and partially opaque, especially so on the right hemisphere, and there was general right-sided atrophy, especially accentuated at the base of the right temporal lobe posteriorly, where the cortex had tumbled inward and the floor of the ventricle felt thin. The right calcarine area was also very atrophic as compared with the left side. The main trunk of the right posterior cerebral artery was thin. There were plain granulations in the fourth ventricle. The cerebellum, except for thickening of the pia, looked normal. The basal blood vessels were small, moderately thickened and not atheromatous. There was thickening and opacity of the spinal pia. Grossly and microscopically the pyramidal tracts appeared equal and not appreciably degenerated.

In the cortex the pia was thick and it contained an infiltrate of lymphoid and plasma cells in the deepest layers. There were

Psychiatric Institute — Report of Histological Laboratory

marked spider cells in the first and deepest layers and a typical infiltrate of lymphoid and plasma cells throughout the cortical vessels. The paracentral lobules were both much affected, more so than the frontal regions, with marked disorder in the cortex, increased vascularity, and thickening of the pial blood vessels. In the left paracentral lobule some of the subcortical vessels showed advanced colloidal changes; in general, however, this side was less affected than the right. Typical rod cells were not numerous. In the spinal cord there was much massive infiltrate in the pia, but practically none inside the cord substance. The small blood vessels were much thickened and homogeneous. In the blood vessels there was a mild grade of intimal proliferation of a girdling character, and one vessel was closed by a proliferative process.

The patient, an alcoholic actor of thirty-four, had had syphilis at an unknown date. Classical general paralysis developed about three years before death. One year later there was an apoplectic-form attack preceded by aphasia, and a few months before death a transitory weakness of the right hand and face, and later left-sided weakness with anæsthesia and hemianopsia; the hemianopsia persisted until death, and in the last two months of life there was left-sided weakness and some anæsthesia.

d. GENERAL PARALYSIS, WITH OPTIC ATROPHY**Four Cases**

Nos. 552, 566, 571, 563

No. 552. *St. Lawrence State Hospital*.—A small brain, with the frontal poles narrowed and somewhat pointed by lateral compression, the result of a double hemorrhagic pachymeningitis which was present on the convexity. The convolutions, although jammed together and compressed, had evidently been somewhat atrophic. The right hemisphere, as a whole, was considerably smaller than the left, and all of the convolutions of the right convexity looked smaller than those of the left. There was little difference in those of the base. The contralateral or left cerebellar hemisphere was somewhat smaller than the right. The pia was whitened and thickened, especially on the upper convexity.

Psychiatric Institute — Report of Histological Laboratory

The microscope showed plain general paralysis, with many plasma cells and numerous rod cells, and a moderate spider cell reaction. In the spinal cord the pia was infiltrated, but the cord substance nearly free. The left optic nerve was small, it showed an essentially complete loss of fibers, and marked thickening and infiltration of the sheath and surrounding pia.

The patient, a temperate janitor of twenty-five, without mention of syphilis, became suspicious of his wife two months before admission. He was restless, uneasy, with exalted ideas of wealth, excitability and inability to attend to his work, with consequent loss of employment. On admission the pupils reacted promptly, the reflexes were exaggerated, speech was incoordinate, there was tremor of the facial muscles, tongue and fingers, a mitral murmur without evidence of failing compensation. He was quiet, took some interest in his surroundings, had no delusions or hallucinations, but lacked insight. His memory was defective and a diagnosis of general paralysis was made. After a slight improvement he went home, but soon returned in an active, resistive, destructive condition, but physically about the same as when first admitted. The pupils, however, were sluggish, and vision was impaired. Examination of the discs showed atrophy quite complete in the left eye, and progressive in the right. In the latter the field of vision was contracted. He continued active and resistive, had a light convulsion; lumbar puncture was positive, and death occurred from general paralysis and exhaustion four years after his first admission. Used for studies in general paralysis.

No. 566. *St. Lawrence State Hospital*.—A medium-sized brain, with some atrophy and a thick, turbid pia on the anterior convexity, but without focal lesions. The blood vessels were grayish, but not much thickened. Ependymal granulations were present. Both optic nerves were thin and gray, and microscopically they showed complete atrophy, with much neuroglia overgrowth. The pia about the nerves was infiltrated, and the blood vessels were much thickened.

In the cortex there were characteristic changes of general paralysis, slight in the paracentral areas and more intense in the frontal parts. In the spinal cord there was slight infiltration of the pia.

Psychiatric Institute — Report of Histological Laboratory

The patient was forty-five, intemperate, but syphilis was not mentioned. The psychosis was something over one year in duration. It began with erratic talk and grandiose delusions. His sight had begun to fail, apparently just before this, and in about three months he was totally blind. The patellar reflexes were increased, the organic reflexes not controlled. There were tremors, slurring speech, Romberg sign and positive spinal puncture. The clinical diagnosis was general paralysis. Four days before death severe general convulsions occurred; convulsions were not mentioned previously, although there had been some dizzy spells. Used for studies in general paralysis.

No. 571. *Willard State Hospital*.—The brain was of moderate size, the pia was hazy and diffusely thickened over the convexity and base, particularly in the frontal regions. There was considerable atrophy of the cortex toward the frontal poles and the optic nerves appeared atrophic. The cerebral arteries were only slightly thickened, a few small granulations were present on the floor of the fourth ventricle. Sections from different regions of the cortex showed the characteristic changes of general paralysis, most marked in the prefrontal region where there were small areas of focal devastation in the cortex.

The patient was a clerk of thirty-one, whose father and other male members of the family had all died of "paralysis" as far back as known. The patient acquired syphilis at twenty-five and presented a venereal scar. The onset of the psychosis was characterized by restlessness, irritability, delusions and absurd plans. He was admitted three years before death; he was boisterous and talked almost constantly in a rambling manner and was easily distracted; insight and judgment were lacking. The left pupil was dilated, both were sluggish to light; later blindness developed. There was a tremor of the tongue and fingers; speech and writing defect; unsteady gait, and a slow left knee-jerk. The course was fluctuating, but progressive, and death resulted from general paralysis and exhaustion. Used for studies in general paralysis.

No. 563. *Hudson River State Hospital*.—The brain was rather small; the pia was slate-colored; the lobes were difficult to separate. The convolutions were atrophic toward the frontal poles. The basal vessels were diffusely thickened with an occa-

Psychiatric Institute — Report of Histological Laboratory

sional plaque of atheroma present. A few granulations were present on the floor of the fourth ventricle. The right optic nerve appeared extremely atrophic, the left scarcely less so. The spinal cord was atrophic looking; on cross section the lateral pyramidal tracts were grayish. In addition to the chronic meningo-encephalitic changes of general paralysis, a diplococcus infection, producing a fibrino-purulent meningitis was present; there was little invasion of the cortex by this infiltrate. In the cervical and dorsal regions of the cord a bilateral degeneration of the pyramidal tracts most marked on the left side was present, the size of the degenerated area diminished downward.

The patient was an intemperate colored man of fifty-one. Syphilis was acquired after marriage; one child was living; five died in infancy. At forty-two his eyesight began to fail and blindness ensued within two years. At forty-six he was noted as irritable and assaultive; about this time he was said to have had a "spinal stroke," since which time he was unable to stand or walk alone. On admission, about eighteen months before death, the patient, who had formerly been irritable and boastful, was quiet, with partial insight. There was paresis of both the lower and upper extremities, ataxia of the left upper extremity, absence of deep and superficial reflexes, except the cremasteric, twitching of the anterior thigh muscles, fine tremor of the face and tongue, and marked speech defect. Cutaneous sensibility was impaired over the abdomen and lower extremities, there was anæsthesia of the ulnar nerves, impairment of hearing in the left ear, immobile pupils, and total blindness. Mentally, characteristic deterioration of general paralysis was present. Shortly before death convulsions occurred limited to the face and upper extremities. Used for studies of the cortex, and tract degenerations in the spinal cord.

c. GENERAL PARALYSIS, JUVENILE TYPE**One Case****No. 568**

No. 568. *Central Islip State Hospital.*—A good-sized brain (1,205 grammes), with diffuse atrophy and widening of the fissures, narrow convolutions and a tough gray pia, with gelatinoid

Psychiatric Institute — Report of Histological Laboratory

looking fluid in the meshes; the pia of the cord was similar. The cerebellum was practically free from this appearance. The basal arteries were small, moderately thickened and not atheromatous. Numerous endymal granulations were present.

Microscopically, the case presented marked infiltration of the cortical vessels, many of which were crowded with lymphoid and plasma cells; a marked general spider cell reaction in the first and deepest layers of the cortex and in the deep marrow, especially around the vessels. Rod cells were abundant, the layering was in places much disturbed, but cell loss was hard to estimate. There was considerable pigment in the nerve cells themselves, and in the vessel sheaths, less in the neuroglia.

The patient, a boy of seventeen, was admitted about seven months before death. The whole duration of his psychosis was probably over two years. His father was syphilitic, with probable early tabes. The patient was a second child; a third died of "spinal meningitis" at seven; a fourth was in fair health, and there had been no miscarriages. The patient probably did not have acquired syphilis, but there were symptoms of congenital syphilis (sores about the mouth, poor teeth, etc.). He never liked school, did not reach the grammar grades, and changed his occupation frequently after beginning work at fourteen. Between the ages of fifteen and sixteen, he grew irritable, erratic, careless, and collected worthless objects. Later he had difficulty in speech with a tendency to repetition. On admission he was simple, silly, and mildly elated, expecting to get a job in the biggest machine shop in the world. He easily lost control of himself in facing questions, but answered rather clearly when not excited; said he left his position because his conscience told him to do so. He was well oriented, with a good grasp on his past history, but with much impaired judgment. He was poorly developed, with dilated, unequal pupils which reacted sluggishly to light. There was fine tremor of the tongue and face, coarse tremor of the fingers; he stumbled in the test phrases. The jaw, elbow and wrist reflexes were diminished. Spinal lymphocytosis was very marked. He remained nearly stationary until about three months before death when the symptoms progressed more rapidly, and he grew more careless, more unsteady and more tremulous. Two weeks before death con-

Psychiatric Institute — Report of Histological Laboratory

vulsions (the first mentioned) occurred, and they were numerous after this. He lay in bed in a stupid, restless condition with muscular twitchings, especially in the right side, and marked perseveration in speech. He failed rapidly and died in stupor. Used for studies in general paralysis.

ii. CEREBRAL SYPHILIS**Seven Cases (Twenty-three Cases)**

The group of syphilitic cerebro-spinal disorders consists approximately of twenty-three cases, although a number of these are not undoubted. The uncomplicated cases are subjoined while those cases in which another disease process or lesion has the more pronounced clinical or anatomical setting as general paralysis or focal vascular lesions, resting on a specific arteriosclerotic basis, are indicated by a cross reference in an appended numerical list with index page numbers.

The multiplicity of forms of cerebro-spinal syphilis makes it impossible to sharply define the limitations of the disease process itself or to satisfactorily classify the variety of combination forms. Admitting the coexistence of meningitis and endarteritis in all cases, whether the meningitis is diffuse or focal with gumma formations, usually one of these reactions occupies the foreground; therefore it seems desirable to designate these cases with reference to their more pronounced clinical and anatomical features: (a) the gummatous, (b) the meningitic, and (c) the endarteritic forms, and combination forms of these, especially the latter two, which constitute probably the larger number of cases.

a. GUMMATOUS FORMS**Two Cases**

Nos. 585, 596

No. 585. *Manhattan State Hospital, Institute Service.*—A medium-sized brain with general haziness and moderate thickening of the pia. In places, chiefly on the right side, the pia contained a slightly gelatinous looking grayish material, especially in the fissures. No focal lesions were found on the convexity. In the left Sylvian fossa there was a grayish mass of tissue (a gum-

Psychiatric Institute — Report of Histological Laboratory

matous mass) in which the middle cerebral artery was imbedded. Horizontal sections showed a fresh softening of the left caudate nucleus and of the anterior part of the right lenticular nucleus. Some gummatous material was found on the pons, and in the depths some dark discoloration of the tissue indicated an extension inward. No granulations were seen on the ependyma. The arteries were grayish, translucent and moderately thickened; no atheroma was seen. The pia of the cord was generally thickened and somewhat gray.

Microscopic examination showed many very small gummata in various parts of the meninges, numerous giant cells, infiltration of the pia with lymphoid and plasma cells, and extensions into the cortex in the regions of the gummata only, the cortex in general being free from infiltration. In the inflammatory and gummatous tissues in the left Sylvian fossa, about the middle cerebral artery, *spirochætes pallidæ* were clearly demonstrated, but in various other regions of the pia they were not found after a rather extensive search. Many of the blood vessels showed typical girdling endarteritis and infiltration of the adventitial sheaths with lymphoid and plasma cells.

The patient, a painter aged forty-seven, was treated for about five months before admission for secondary syphilis; the date of his infection is not known. He seemed mentally sound, except for one interval when he left home for a few days, until just before admission, when he complained of pains in the back of the head and neck, and later had six short convulsions with loss of consciousness followed by complete recovery. He then became dull, drowsy, but not unconscious, was forgetful, spoke thickly and mixed up his dates. On admission he had poorly defined right hemiplegia. Although dull, he was slightly euphoric at times, though not grandiose. Both upper lids drooped, the reflexes were exaggerated, there were tremors of the tongue, face and fingers. Lumbar puncture showed 250 cells to a cubic millimeter. The Noguchi reaction was positive in both blood and spinal fluid. After admission he grew drowsier and died in eleven days. Used for studies in cerebral syphilis.

No. 596. *St. Lawrence State Hospital*.—The brain weighed 1,260 grammes; the pia over the convexity was slightly hazy, over

Psychiatric Institute — Report of Histological Laboratory

the base considerably thickened, especially over the pons and cerebellum. An irregular triangular-shaped area of softening four centimeters in diameter, and presenting a translucent cicatricial appearance involved the pia and cortex over the basal surface of the right temporal lobe. The cerebellar folia beneath the area of pial thickening appeared yellowish and atrophic; the foramen of Magendie was closed by an exudate. The cerebral arteries were diffusely thickened. In the pia over the convexity and base were numerous lymphoid and plasma cells and the vessels presented a girdling syphilitic endarteritis. The cord showed haziness and thickening of the pia and infiltration with lymphoid and plasma cells.

The patient was a woman of forty-five, four of eight children died in infancy; at thirty-nine "nervous trouble," diagnosed as poliomyelitis, following childbirth. Onset of psychosis about five months before death, asked for poison, conversed with imaginary people. On admission, one month before death, complained of frontal headache and pain and numbness in her legs, the muscles of which were atrophied; they reacted to faradic electricity. The left pupil was larger than the right, the right was immobile; there was a suggestion of nystagmus, vision was impaired and hearing was defective; smell and taste were much impaired; cutaneous sensibility was delayed, most striking over the lower extremities; the deep reflexes were almost lost in the legs, in the arms slightly diminished; double Babinski-sign; intention tremor of the arms and hands. Mentally, the patient was rambling in conversation, orientation and memory defective, hallucinations of sight and hearing. Death from lobar pneumonia. Used for cord and cortex studies.

b. MENINGITIC FORMS**Two Cases****Nos. 550, 626**

No. 550. *Manhattan State Hospital, Institute Service.*—A medium-sized brain with little atrophy; moderately thickened, tough pia; negative cranial nerves, and slight general thickening of the large cerebral arteries, with some atheroma of the basilar trunk, and yellowness with partial or complete occlusion of various

Psychiatric Institute — Report of Histological Laboratory

small vascular branches near their origin from the large vessel. No granulations.

Microscopic examination showed an abundant exudate of lymphoid and plasma cells about the medulla oblongata, in the pia of the gyrus rectus, but with rare exceptions no infiltrate about the intracortical vessels, and when present, such infiltrate was plainly an extension from the pia. The vascular changes consisted in some thickening and homogeneous changes in the walls of the largest vessels and suggestions of a fibrous transformation. In many of the medium-sized and smaller vessels there was a marked obliterative endarteritis, and the intimal tissues were often dissected from the membrana elastica by layers of "gitter" cells. In some of the vessels around the medulla oblongata there was marked endothelial proliferation with a tendency to rechannelization, and zones of gitter cells next to the elastic membrane which dissected off the endothelium as above and crowded it toward the center of the vessel.

The patient, a bartender of fifty, and a steady drinker, with a history of previous syphilis, died three weeks after entrance. About two years before death, after a blow on the head from a sledge-hammer, he became drowsy, forgetful and suffered from headaches. He became impotent about five months before admission. Apparently he had a transitory partial paralysis of both third nerves a month or so later, with resulting ptosis of the left upper lid, and right external strabismus, but this was all recovered from in four days. He was disoriented, very contradictory in statements, fabricated, but consciousness was not clouded. The pupils were unequal, but reacted with a limited range of movement, the right was less prompt. There was no speech defect, no tremor in writing but letters were sometimes transposed or omitted. There was general muscular wasting and complaint of pain in the legs and arms, and he dragged his feet somewhat. The extensor power was diminished on the left especially, and there was tenderness on deep pressure of the leg muscles. The right knee jerk was normal, the left diminished. Two days after a lumbar puncture, which was abundantly positive, he was unable to stand or walk; progressive dullness and drowsiness came on, and

Psychiatric Institute — Report of Histological Laboratory

he died eight days later. The clinical diagnosis was dementia paralytica, with Korsakoff's psychosis. Used for studies in cerebral syphilis.

No. 626. *Manhattan State Hospital, Institute Service.*—A fair sized firm brain with slight thickening of the pia of the convexity, little atrophy, no focal lesions, thickening, some unevenness and atheroma of the large blood vessels, and some gray translucent beading of the smaller ones. Rusty discoloration and shrivelling of the anterior communicating artery, which was found microscopically to be obliterated. Slight ependymal granulations. Whitening of the pia in the spinal cord, and cartilaginous plaques posteriorly. The left hemisphere was twenty-one grammes heavier than the right. In the anterior part of the left optic thalamus, just behind the knee of the internal capsule, was a gray softening containing granule cells, but without cavity formation; the adjacent part of the internal capsule was slightly pale, and some fibers entering the thalamus through the anterior limb were destroyed by the softening.

Microscopically the cortex showed no infiltration excepting rarely an extension from the pia; the latter was irregularly and, for the most part, slightly infiltrated over the hemispheres, but considerably more so over the brain stem and spinal cord, especially in the thoracic and lumbar regions. There was no appreciable loss of nerve fibers in the spinal cord or in the optic nerves. In the right motor face area of the cortex fewer Betz cells were seen than in the left. In the blood vessels generally there were frequent examples of typical endarteritis obliterans with a more or less bunched exudate in the adventitia.

The patient, a printer of forty-five, anæmic and salivated, was admitted nine days before death. He had had syphilis five years previously, and specific treatment for four years after the infection. About three months before death severe headaches and dim vision occurred; nevertheless he continued to work until seventeen days before entrance. Two weeks before admission he thought he was still working, his talk was rambling and confused, and he was dull and uneasy, but he stated that he was happy and only a little run down; he was not grandiose. He mixed his dates, was dis-

Psychiatric Institute — Report of Histological Laboratory

oriented and without insight. He had unequal irregular Argyll-Robertson pupils, but exaggerated knee and Achilles jerks; there were tremors of the hands, and paralysis of the right face. He continued to be drowsy, confused and disoriented until death. Lumbar puncture was positive. The clinical diagnosis was syphilitic meningitis. Used for studies in cerebral syphilis.

c. ENDARTERITIC FORMS**Three Cases**

Nos. 561, 562, 615

The following is an additional list of cases with focal vascular lesions, the arteriosclerotic process being essentially due to syphilis in probably all instances, an accompanying specific meningitis of either a low or high grade was present in all cases:

	PAGE.
No. 577	221
No. 617	222
No. 574	221
No. 603	226
No. 594	228
No. 575	225
No. 546	226
No. 597	230
No. 614	234
No. 569	231
No. 616	238
No. 586	232
No. 605	232
No. 589	239
No. 598	240
No. 593	240

No. 561. *Hudson River State Hospital*.—The brain was of medium size, the pia slightly thickened over the convexity and base. The convolutions were moderately full. The cranial vessels were free from adhesions; a few small granulations were seen on the floor of the fourth ventricle. The larger cerebral arteries were slightly but diffusely thickened. Microscopically, lymphoid,

Psychiatric Institute — Report of Histological Laboratory

plasma and mast cells were found in the pia but no diffuse infiltration of the cortical vessel sheaths; occasional mast cells were seen in the latter, also a slight degree of endothelial proliferation, changes seen in certain cases presumably syphilitic.

The patient was always intemperate. His mental trouble began with irritability, restlessness and threats to kill his father. Further notes state that he was silly, incoherent, tremulous and unsteady on his feet; pupils normal in reaction. Death from intestinal obstruction. Supposed to be a case of general paralysis. Used for cortical and vessel studies.

No. 562. *Hudson River State Hospital*.—The brain was of moderate size; the pia slightly thickened over the convexity, less so over the base. There was a slight degree of atrophy of the convolutions but this was not marked, no granulations were seen on the floor of the fourth ventricle. The larger blood vessels did not appear thickened. A small number of lymphoid and mast cells were found in the pia but no undoubted plasma cells; there was also a considerable amount of pigment in and about the cortical vessels. The vessels were not thickened, except in the medulla and cervical cord where there was proliferation, particularly of the intima in the smaller vessels; lymphoid cells were also common here and an occasional plasma cell was seen. A "combined sclerosis" involving the posterior columns, the direct cerebellar tracts and pyramidal tracts was demonstrable in the first cervical segment, the only one received.

The patient was a painter of forty-eight, a venereal disease at twenty-three which left a scar on the corona glandis. The onset of his psychosis occurred about two years before death; he became depressed, suspicious and uneasy; orientation and memory were impaired; his pupils and speech were normal, writing tremulous. For about four months before death the patient was very hypochondriacal and he declined physically, the pupils were irregular but reacted satisfactorily, the deep reflexes were exaggerated, marked Romberg-sign with unsteadiness of gait, fibrillary tremors of tongue and fingers and much stumbling on test phrases were observed. He was spoon fed because of almost complete paralysis of his arms. Death resulted supposedly from general paralysis. Used for cortex, vessel and cord studies.

Psychiatric Institute — Report of Histological Laboratory

No. 615. *Hudson River State Hospital*.—A rather large brain with injection and engorgement of the tough pia, tense convolutions, no focal lesions. The blood vessels were moderately thickened, there was much thickening of the pia in the Sylvian fossæ, the left optic nerve was small and gray. Fine granulations in the ependyma.

Microscopic examination showed axonal alteration in the Betz cells and some of the larger pyramids, with reduction or absence of the stainable substance generally. The cortical blood vessels were not infiltrated, but in the pia there were occasional masses of lymphoid and plasma cells, especially in the pia of the frontal and prefrontal regions. In the sheaths of some of the blood vessels there was occasional very slight infiltration, but intimal proliferation was slight or absent; in the large vessels generally it was absent and infiltration of the sheaths was very scanty. In the pia of the cerebellum, infiltration was patchy but decided, and essentially absent in the cortex. The latter was sometimes obliterated in a small part of a single folia. The vessels responsible for such lesions were not found. The right optic nerve showed slight degeneration on one side; in the left degeneration was essentially complete.

The patient, a negro of about twenty-seven, was admitted sixteen days before death with a history of sudden onset three days previous to admission, with noise, restlessness, destructiveness and hallucinations of sight. He was sometimes rigid, with closed eyes and clenched hands, sometimes he threw himself from the bed, kicked and twisted his body. His speech was indistinct and thick and showed repetition of set phrases. The answers could seldom be understood. They were indistinct and irrelevant. Five days after admission diarrhœa developed and lasted five days. Physical examination showed emaciation, "undoubted scars of syphilitic infection," diminished deep reflexes, active superficial reflexes. No Babinski-sign. There was marked incoordination and coarse tremors of all the extremities, and a fine facial tremor. The pupils were equal, responsive, and there was left external strabismus; no defects of vision were mentioned. The temperature ranged from 100 to 102. Death from broncho-pneumonia. Used for studies in central neuritis and cerebral syphilis.

Psychiatric Institute — Report of Histological Laboratory**iii. THE SENILE AND ARTERIOSCLEROTIC DISORDERS**

The former group is represented by six cases which have been studied in a comparative manner. In one case (607) with a psychosis of a manic-depressive character without evident deterioration, there was little brain atrophy and complete absence of cortical focal necrosis, whereas in two other cases (558 and 608) where mental deterioration was advanced, there was considerable atrophy and abundant focal necrosis. Another group of cases represented in the current year's material by cases (555, 606 and 612) show a high grade arterio-capillary fibrosis of the smaller cortical vessels but no cortical necrosis.

In the arteriosclerotic group of cases the same plan of detailed examination of the vessels, pia and cortex has been pursued as for the preceding year with the indications pointing strongly to the specificity of the arteriosclerotic process in a relatively large percentage of the cases, about 50 per cent. of the cases in this group. This percentage is naturally higher than any routine autopsy service would give, as these cases have been selected and sent because of their problematical character. This material has been of very special value in the further studies on arteriosclerosis.

SENILE AND ARTERIOSCLEROTIC DISORDERS**Thirty Cases**

A. Simple senile dementia.....	6
B. Arteriosclerotic disorders:	
I. Without focal lesions.....	1
II. With focal lesions:	
i. Basal trunk disorders.....	0
ii. Primary branch disorders:	
1. Inferior cerebellar artery disorders.....	1
2. Superior cerebellar } combined.....	2
3. Posterior cerebral }	
4. Middle cerebral	6
5. Anterior cerebral	1
iii. Terminal branch or twig disorders:	
1. Long or medullary artery disorders.....	10
2. Short or cortical artery disorders.....	3

Psychiatric Institute — Report of Histological Laboratory

SENILE DISORDERS

Six Cases

Nos. 607, 558, 555, 606, 612, 608

No. 607. *Binghamton State Hospital*.—The brain weighed 1,485 grammes and was rather swollen; the pia was not perceptibly thickened, though slightly hazy. The blood vessels were free from atheroma and were only remarkable for their small size. Microscopically, a few lymphoid cells were present in the pia; corpora amylacea were fairly numerous in the superficial layer of the cortex. No focal necroses were present in the cortex which, on the contrary, was well preserved.

The patient was a woman of seventy-six with a psychosis of a manic-depressive character. Five previous attacks and admissions were recorded. Mania alternated with depression, with periods of normal action and thinking intervening, when she was well oriented, conversed coherently and had a splendid memory. Death from broncho-pneumonia. Used for comparative cortex and vessel studies.

No. 558. *Central Islip State Hospital*.—The brain was of fair size, the convolutions moderately atrophic, the pia moderately hazy and thickened; no softenings were seen or felt. The vessels were moderately atheromatous; numerous pin-point focal necroses were present in the cortex especially marked in left frontal and left temporal convolutions. Depletion of nerve cells was evident in these same areas.

The patient was a man of sixty-two, an efficient clerk until two years before death when he gradually failed to do his work satisfactorily and became increasingly irritable, childish and forgetful. On admission, one year before death, he was confused and inactive, muttered to himself and made incoherent replies; there was a marked tendency toward paraphasia and perseveration at times; a satisfactory examination of his memory and grasp was impossible. Physically he was emaciated, his arteries were thickened and there was roughness of the first heart sound. The deep reflexes were exaggerated, the pupils were sluggish to light, the tongue and fingers were tremulous and the gait was unsteady;

Psychiatric Institute — Report of Histological Laboratory

no special focal symptoms were observed. Used for comparative cortex studies.

No. 555. *Manhattan State Hospital, Institute Service.*—The brain was small and atrophy was marked particularly toward the frontal poles; the pia was rather hazy and diffusely thickened and was closely adherent to the cortex; the basal vessels were tortuous and moderately thickened. Microscopically, there was a high grade arterio-capillary fibrosis of the finer cortical vessels, complete absence of any pial or cortical infiltrate or evidences of cortical focal necrosis.

The patient was a porter of fifty-nine; at fifty a transitory spell of unconsciousness, no paralysis. At fifty-three he made mistakes in his work, was dull and forgetful; at fifty-six attacks of giddiness; at fifty-eight he lost his position because of incompetency, was more forgetful and had difficulty in understanding things; latterly wandered away from home and would lose himself. On admission, five months before death he was restless, uninterested in his surroundings, spoke to no one and asked for nothing. He obeyed simple orders, showed much perseveration in picking out objects and writing, repeated test phrases correctly, in other fields was inaccessible. Death from oedema of lungs and bronchitis. Used for cortex and vessel studies.

No. 606. *Binghamton State Hospital.*—The brain weighed 1,235 grammes. The basal vessels contained a few plaques of atheroma in their walls, the smaller arteries were less affected. The pia was moderately hazy and diffusely thickened; the convolutions slightly atrophic and somewhat firmer than normal. Microscopically, a few lymphoid and endothelioid cells were present in the pia; the finer cortical vessels showed a marked degree of arteriocapillary fibrosis, especially evident in the superficial layers of the cortex; no softenings were associated with these arteriosclerotic changes. Pigmentary degeneration was diffuse and well marked; no cortical focal necroses were present.

The patient was a laborer of seventy-seven with a psychosis of twelve years' duration beginning as a restless depression. On admission orientation for time, place and person were correct; at a later period the patient was described as childish in his

Psychiatric Institute — Report of Histological Laboratory

actions, would sing and dance and shout; expressed many delusions; later he became untidy and demented. The heart action was irregular, arcus senilis was present, casts and albumen were found in urine; death was sudden. Used for comparative cortex and vessel studies.

No. 612. *Gowanda State Homeopathic Hospital.*—The brain weighed 1,020 grammes. The pia was moderately hazy and diffusely thickened, especially over the frontal and prefrontal convexities. The convolutions were somewhat atrophic; the vessels diffusely thickened and contained a few plaques of atheroma in their walls. Microscopically, a girdling endarteritis with moderate atheromatous degeneration, was present in the larger vessels, also a slight infiltration of the pia with lymphoid cells, doubtful looking plasma cells were also seen. Beneath a pial plaque of thickening in the left frontal region the cortical vessels were particularly thickened and corpora amylacea were abundant in the superficial neuroglia felt-work.

The patient was a man of seventy-five, admitted to Manhattan State Hospital at sixty, then described as dull and stupid. At forty a fall, epileptic seizures following, the last convulsion observed was about two weeks before admission; he was usually quiet but periodically had attacks of excitement, complained of persecution, was childish and demented. As a result of granular conjunctivitis the cornea became opaque. He died from lobar pneumonia. Used for cortex and vessel studies.

No. 608. *Binghamton State Hospital.*—The brain weighed 1,340 grammes; the pia was moderately hazy and diffusely thickened over the convexity; the convolutions were somewhat atrophic. A comparatively recent softening destroyed R.T.₁ and T₂, except its middle third, the posterior half of the right angular gyrus and the post parietal gyrus and anterior border of the right pre-cuneus. The basal vessels were moderately atheromatous; the right middle cerebral was markedly atheromatous. Numerous cortical focal necroses were present in this case, rather more abundant in the borders of the arteriosclerotic softening.

The patient was a laborer of seventy-four, intemperate in the use of alcohol and tobacco; admitted from the Soldiers' and

Psychiatric Institute — Report of Histological Laboratory

Sailors' Home one year before death. He was disoriented as to time, place and person; was nervous, restless and apprehensive and reacted to delusions and hallucinations, which were more marked at night. There was a mitral systolic murmur at the apex, the pulse was weak and irregular, and marked arcus senilis was present. Seven weeks before death a left hemiplegic stroke occurred after which the patient was more confused. Used for cortex and vessel studies.

ARTERIOSCLEROTIC DISORDERS

Without focal lesions.

One case

No. 581. *Central Islip State Hospital*.—Dura Mater: Thick bony masses were found in the falx cerebri, and two small platelets of bone in the dura and in the pia near the longitudinal fissure. The brain was of medium size with much chronic thickening and opacity of the pia of the upper convexity, while in the lower part and especially on the base, this was very slight. Contact with the bony thickenings in the falx cerebri apparently produced no effect on the cortex. The basal blood vessels were thickened, somewhat translucent and in places atheromatous. No ependymal granulations were seen.

The cortex was free from inflammatory elements. The pia of the convexity, which was very thick and fibrous, contained an occasional free lymphoid cell, but was not thought to pass normal limits in this respect. The blood vessels in general showed only a very thin layer of intimal proliferation with some splitting of the elastica, sometimes a thicker intimal plaque, and in one vessel a thick, completely girdling process existed together with considerable atheromatous degeneration and numerous elastic strands in the intimal tissues, and some on the outer side of the main elastic lamina. In nearly all cases scanty dark lymphoid cells were found round the margins of the adventitia. Another vessel was collapsed and obliterated, with a folded up elastic membrane; there was scanty fibrous tissue containing a few lymphoid cells at the site of the lumen. Clinical abstract not requested. Used for studies in arteriosclerosis.

Psychiatric Institute — Report of Histological Laboratory

INFERIOR CEREBELLAR ARTERY DISORDERS

One Case

No. 577

No. 577. *Central Islip State Hospital*.—The brain was of medium size, the pia was hazy and diffusely thickened over the convexity, moderately so over the base; the convolutions were fairly full; the cranial nerves appeared normal so far as could be observed. The cerebral arteries were diffusely thickened, presenting a typical syphilitic endarteritis obliterans; the right inferior cerebellar artery was completely obliterated, and a softening destroyed the posterior and inferior half of the right cerebellar hemisphere. The pia contained both lymphoid and plasma cells, most abundantly over the base.

The patient was a man of fifty-one. Three years before death he became inefficient and unable to work or care for himself. Admitted March 11, 1908, there was tremor of lips and fingers, unsteady gait and Romberg-sign, and a few months later this unsteadiness increased; his gait was shuffling, his steps short, and he proceeded with outstretched arms and would fall, but in no special direction. There were coarse tremulous movements of his hands which increased on intended motions. For a year preceding death, bedfast because of difficulty in walking; for a month before death pupils small, equal and reacting; tongue protruded to the right; too weak to talk; reflexes equally exaggerated. Used for cortex, vessel and tract studies.

SUPERIOR CEREBELLAR ARTERY DISORDERS. POSTERIOR CEREBRAL ARTERY DISORDERS

Two Cases

Nos. 574, 617

No. 574. *Hudson River State Hospital*.—A brain with practical occlusion of the right posterior cerebral artery, and destruction of the area supplied by it. Partial or complete obstruction in both superior cerebellar arteries, with fresh softenings in parts of the areas supplied by these. Grossly, the affection in the blood ves-

Psychiatric Institute.—Report of Histological Laboratory.

sels appeared to be in part atheromatous, in part a diffuse whitish or translucent thickening. The pia was only slightly thickened and whitish. No ependymal granulations were seen. At the autopsy a diagnosis of arteriosclerosis and chronic interstitial nephritis was made.

The basilar artery showed marked thickening of the intima with extensive atheromatous changes in this layer. The process was girdling but much more marked on one side, the lumen was much narrowed. A patchy infiltrate of lymphoid, plasma and mast cells was found in the outer sheath, and in places it penetrated the media. The elastica was considerably split up.

The patient, an epileptic of fifty-nine, with no history concerning the beginning or duration of her psychosis, had frequent convulsions followed by irritability or a dream-like condition. No mention was made of any neurological symptoms. She was dull, disoriented, impulsive and made assaults. After being in the hospital two years, she grew feeble and became a bed patient. About four months later she died of pneumonia. Used for series and for study of the vessels.

No. 617. *Kings Park State Hospital.*—A rather small atrophic brain with moderate thickening and whitening of the pia in the mid-convexity, stiffening and atheroma of the cortical blood vessels; marked atheroma of the basal vessels; softening of the under surface of the left temporo-occipital region, fresh in the anterior two-thirds, old and yellowish in the posterior third, where the visual cortex including part of the cuneus was involved. Fresh softening in the distribution of both superior cerebellar arteries with occlusion of the finer twigs. The left posterior cerebral artery, main trunk, was almost entirely occluded by a whitish plug. The right paracentral lobule was softened and a vascular twig leading to it was occluded by a whitish plug.

Microscopically, the pia was thick and fibrous, and contained some free cells, mostly endothelioid. Much green pigment was found in the cortex but no infiltration. The paracentral lobule showed early softening with loss of nerve cells in places, but little neuroglia reaction. A completely plugged vessel filled with a cellular reticular substance was found in the section. The cerebellar

Psychiatric Institute—Report of Histological Laboratory.

softenings were also very fresh with fresh plugs of fine granular material in the vessels. There were no granulations in the fourth ventricle, but scattered lymphoid cells in the pia of the medulla oblongata. The large blood vessels showed extensive girdling proliferation and much degeneration which often involved the media. The sheaths were infiltrated in places. The elastic stain showed much splitting and cleavage of the elastic membrane.

The patient was a woman of seventy-six who had grandiose delusions of a religious character with hallucinations of hearing and delusions of reference. The psychosis began twenty-six or more years before death. Her health was fair at first but dementia and dullness increased and she was without insight and apathetic. No neurological incidents were mentioned and the diagnosis was paranoia. The autopsy showed fair nutrition and development, aortic stenosis and subacute vegetations on the aortic valves. Used for studies in arteriosclerosis.

MIDDLE CEREBRAL ARTERY DISORDERS**Six Cases**

Aphasias, 547, 575, 546 (?).

Palsies due to softenings, 547, 575, 603, 546, 594, 570.

Palsies due to hemorrhage, 0.

Hemianopsia, 0.

No. 547. *Hudson River State Hospital*.—A medium sized brain, received already cut into transverse slices. There was general atrophy which was accentuated in the left occipital region. In the left supramarginal gyrus there was a large yellow-walled cavity which, however, did not come entirely to the surface but was covered by a thin layer consisting of pia, and apparently a few remains of cortex. There was slight subcortical softening and some yellowness just in front of the cavity and just behind it.

Microscopically, the case showed a much thickened, loose, fibrous pia without any essential infiltration but containing thickened arteriosclerotic vessels. The occipital atrophy amounted in spots to focal lesions which were old, with shrinkage and contraction of the cortex, much cell loss, and neuroglia overgrowth in the form of fibers; in the deeper parts there were many large spider

Psychiatric Institute.—Report of Histological Laboratory.

cells, and the deep marrow was much thinned. The cortex generally was orderly; it showed little neuroglia reaction, stained poorly, and there was a good deal of technical shrinkage.

The patient, a laborer of seventy, was admitted from jail a year and a quarter before death. He had been wandering through the streets and became lost. On admission he was confused and often irritable. Right hemiplegia was indicated by awkwardness of the leg and arm which grew more marked after use. He could hardly button his coat with the right hand, and would frequently miss objects reached for, but apparently he recognized things felt with the right hand. He was disoriented for place, time and persons, but believed he was not insane. He used objects but could not name them, failed frequently in picking out objects named, and could not name things heard. Commands were executed, questions if repeated were understood; the only writing he recognized was his name. Perseveration was marked. He made some letters with the left hand but not with the right; he copied occasionally very crudely; he could not repeat words or sentences. Sensation was dull in the right half of the body, and the muscles of the right side were weaker; the tongue went slightly to the right; the right corner of the mouth drooped; all reflexes were active and equal, except the left Achilles which was absent; no Babinski-sign. There was some twitching of the muscles of the right arm and tremors of the extended fingers on both sides. The pupils were small, irregular, but active; the visual fields normal, old left hemorrhagic retinitis. Blood pressure 180 mm., thickened, tortuous arteries. He remained thus for about three months, then had a severe convulsion in which the right side twitched more than the left. This was followed by confusion but he was as usual a few days later. About a month later a similar attack was preceded by twitching of the right arm and followed by recovery. About a year after admission unconsciousness and general spastic paralysis of the right side and flaccidity of the left. Later there were clonic movements on the left side with flaccidity on the right, and the next day spastic paralysis of the right arm and leg were present; the pupils did not react, but he gradually improved. Clonic spasms returned about a month later without disturbance of con-

Psychiatric Institute — Report of Histological Laboratory.

sconsciousness until the day of death, when the right-sided convulsions began, quickly involved the whole body, and death occurred four hours later. Used for series.

No. 575. *Hudson River State Hospital*.—A medium sized brain with a thick pad, the result of hemorrhagic pachymeningitis, over the right convexity, and some rusty discoloration of the pia, which was markedly thickened on both convexities, and only slightly thickened on the base. Considerable atrophy of the central convolutions in both hemispheres. Considerable atheromatous thickening of the blood vessels, but also a more diffuse, whitish thickening. A softening far back in the left occipital lobe, affecting chiefly LO₂. A fresh softening in the left supra-marginal gyrus which extended to the wall of the ventricle and involved, somewhat, the angular gyrus, with marked thickening of the vascular twigs in this area. Some lack of resistance in the right superior parietal lobule. No ventricular granulations.

Microscopically: Massive patches of infiltrate were found in places in the pia, especially near the softened areas. The endothelium of some of the larger vessels was greatly proliferated and rechannelization was not infrequent. There were also focal areas in the cortex where endothelial proliferation was extremely marked in the small vessels, which were increased in number. Thrombosis also was present in some of the larger pial vessels with subjacent softenings in the cortex. There was no diffuse infiltration of the vessels of the cortex, and even locally such infiltration was very slight. The pachymeningitic pad was found well organized in the outer and inner layers, with much cellularity and endothelial proliferation in the vessels of these layers. Between the two there was a thick layer of blood.

The patient was eighty-two. Nothing was known of his early life. Right sided apoplexy occurred at about the age of seventy-nine. He improved from this, but three years later he had two more light attacks, after which he became depressed, suicidal and threatening. Evidently comprehension of questions was difficult. He had little memory, was confused concerning time and his emotions were variable. One day he laughed, cried and prayed inside of five minutes. His productions were rambling, much

Psychiatric Institute—Report of Histological Laboratory.

jumbled, and he had no insight. He was feeble, complained of headache; the right pupil was larger, but the lens was partially opaque; both reacted. The deep reflexes were exaggerated, especially on the right side. The gait was unsteady, the speech paraphasic, the muscular strength weaker on the right. He gradually failed, became bedridden and, although clearer at times, constantly comprehended with difficulty and was in a state of marked confusion. Weakness of the left side developed gradually and finally became more marked than that on the right, with dragging of the left foot and increase of reflexes. The aphasic examination was peculiarly difficult on account of poor vision, his failure to realize the object of the examination, his excitability and profound confusion. He seemed not to realize that his speech was practically unintelligible, he was paraphasic, had difficulty in naming objects, showed perseveration, used wrong letters in spelling, could not write spontaneously or to dictation, copied simple letters, but not words. He could understand simple orders and the use of objects, could recognize things tasted, felt and probably smelled, but not written or printed words. Used for studies in cerebral syphilis.

No. 603. *Hudson River State Hospital*.—A large brain with a thin, hemorrhagic layer on the dura of the right upper convexity, extensive fresh softenings in the right middle cerebral area, the temporal lobe excepted, most marked, in the frontal, lower central and post parietal regions. Moderate thickening and atheroma of the vessels leading to these areas and general thickening of the blood vessels as a whole with only slight atheroma. Grayness and thickening of the pia; some thickening and whiteness of the spinal pia; scattered endymal granulations.

The cortex in general showed no evidence of general paralysis, but considerable pigmentation, occasional packets of blood vessels, and leucocytes in the blood stream. In the pia the blood vessels were much thickened, pale and fibrous, stained poorly and appeared over-numerous. In the region of the softenings, which were both fresh and old, there were numerous lymphoid cells and a few large plasma cells in the pia, many granule cells and increase of blood vessels. In places there was occlusion of vessels

Psychiatric Institute — Report of Histological Laboratory.

with a dissecting up of the intima by granule cells, the remnants of the intima being mixed in with the cells and containing evidence of partial organization as seen by new formed blood vessels within the mass. In the acuter areas of softening there were many thrombi which explained in part the somewhat focalized character of these softenings, the area of the middle cerebral artery not being affected as a whole. Where such thrombi existed there were extensive areas of necrosis and collections of perivascular debris. The large arteries showed various degrees of thickening of the intima which often girdled the vessel in a thin layer; in the thicker plaques there was usually atheromatous degeneration. The elastica was split in places into several laminae. In the spinal cord there were scattered lymphoid cells in the pia, the latter showed little else besides general thickening, and a thickened fibrous-like condition in the walls of the small blood vessels. There was a progressive degeneration and an open sieve-like condition in the left pyramidal tract which contained a few granule cells in the spaces, and neuroglia or spider cells were more abundant here than on the right side. Corpora amylacea were present, especially in the posterior columns.

The patient, an excessive drinker aged seventy-four (syphilis not mentioned) had had delirium tremens five or six times. The psychosis probably lasted about three years. At first he was quiet; later restless and yelling, with probable hallucinations, but he said that he felt "first-rate." The pupils were unequal and sluggish, the reflexes exaggerated. His memory was very defective and he was disoriented for time and place. Later he was quite loquacious. Six months before death a gradual loss of power occurred in the left arm, the left elbow jerk was active, the left pupil larger, the left lid drooped slightly and the facial lines were obliterated. Later the left leg was partially paralyzed, and he had only slight use of the whole left side. Six days before death failure became rapid, and gangrene of the left foot which had developed a short time before resulted in septicaemia from which he died. Used for studies in arteriosclerosis, and for general tissue studies.

No. 546. *Buffalo State Hospital.*—The brain was small, asymmetrical, the left side being smaller, with a deep old lesion in

Psychiatric Institute — Report of Histological Laboratory.

the left parieto-temporal region which destroyed the first and second transverse temporal gyri, and in the depths the left optic radiation from the level of the floor of the ventricle upward. The blood vessels entering this area were not occluded, but a slight obstruction plus a girdling endarteritis was found in the main stem of the branch supplying this part; it did not, however, seem adequate to produce the lesion. There was a more acute pulpy softening in the left superior parietal lobule which extended beneath the upper two-thirds of the post central gyrus. Most of the blood vessels were small and soft. The pia was whitened and moderately thickened, more especially on the mid-convexity. The ependyma was uneven, but not granular.

In the spinal cord there was a plain tabetic degeneration in the posterior columns affecting mostly the lumbar region. Occasional lymphoid cells were seen in the pia; in the cortex there was much pigment, but neither infiltration nor rod cells were found. General paralysis seemed to be excluded.

The patient, a man of sixty-eight, was admitted nineteen years before death, and about a year after an apoplectic attack that left the right side weak and some speech defect. He complained of various right sided symptoms such as numbness, and had headaches and some dizziness. He tried to kill himself at fifty-five; at fifty-eight complete right-sided paralysis with unconsciousness came on, but recovery was prompt. Some pains in the right side of the head and in the right shoulder were complained of. A little later there was ataxia and absent knee jerks. Epileptiform convulsions, often with paralysis or weakness of the right side came about this time, but recovery was prompt afterward. A series of these occurred three years before death with coma for two days. Later, about two years before death, severe pains in the right arm and leg followed or preceded the convulsions. He failed gradually and died. The pupils always reacted, but the knee jerks were absent. Used for series, and for study of the spinal cord.

No. 594. *St. Lawrence State Hospital.*—A brain weighing 1,480 grammes, pia moderately hazy and thickened; the larger vessels were markedly atheromatous, especially the right middle cerebral, the trunk of which was occluded with a recent ante-

Psychiatric Institute—Report of Histological Laboratory.

mortem clot. An old slit-like softening destroyed the posterior half of R. T.₁; a recent softening involved the area supplied by the right middle cerebral artery due to thrombosis of the trunk of the right middle cerebral artery; an endarteritis probably syphilitic in origin was present in the larger and many of the smaller vessels; lymphoid and occasional plasma cells were found in the pia, and there was a moderate hypertrophy and hyperplasia of the neuroglia.

The patient was a man of sixty-nine. Three years before death he suffered a convulsive seizure followed by a period of unconsciousness; afterward he was nervous and confused. Admitted one year before death; memory and orientation were defective, insight good; all answers were relevant, no delusional or hallucinatory trend observed. One week before death he suffered another convulsive attack, afterward never fully regained consciousness; he understood and answered all simple questions intelligently; the left arm was held rigidly over the chest. Death from bronchopneumonia and cerebral thrombosis. Used for vessel and cortex studies.

No. 570. *Kings Park State Hospital.*—The brain weighed 1,316 grammes; the pia was hazy, slightly thickened over the convexity; a narrow slit-like old focus of softening cut into the upper part of L. F.₃; a moderately old softening destroyed the posterior half of the right supramarginal gyrus, all of the angular and post parietal gyri, and extended mesially to the interparietal fissure, the posterior portions of R. T.₁ and the posterior part of R. T.₂ were also included in the area of softening, the middle portion of the right posterior central gyrus was atrophic and undermined; the left parietal lobe was acutely swollen. The basal vessels and the vessels leading to these several foci were moderately arteriosclerotic. Microscopically, a slight degree of intimal proliferation most evident in the smaller terminal arteries, no lymphoid or plasma cells in the pia or vessel sheaths.

The patient was a man of seventy-one; gonorrhoea and syphilis at twenty. Father died of apoplexy, a parental cousin of "paralysis," a sister was insane. Four years before death traumatism after which there was a change of character, deterioration with

Psychiatric Institute — Report of Histological Laboratory.

reduction of working capacity. Seven months before death there was a temporary loss of speech with a brief delirious episode. On admission his pupils were irregular in outline and Argyll-Robertson; there was a slight Romberg-sign. Orientation and memory were defective, insight good. About three months before death another seizure with loss of muscular co-ordination in left arm, impaired tactile and temperature sense, dulling of pain sense. Two days before death general epileptiform convulsions with flaccid paralysis of the left arm and leg. Death from cerebral embolism. Used for cortex and vessel studies and a partial series.

ANTERIOR CEREBRAL ARTERY DISORDERS**One Case****No. 597**

No. 597. *Hudson River State Hospital*.—The brain was rather large and swollen, especially the right hemisphere, the convolutions of which were somewhat flattened over the frontal pole. A pear sized and shaped hemorrhage was present in the centrum semiovale of the right hemisphere, its apex directed toward the basal nuclei, its base toward the frontal pole; a ruptured aneurysm one centimeter in diameter was found in the first part of the right middle cerebral artery; the basal arteries showed a low grade endarteritis obliterans of a syphilitic character. The pia was infiltrated with lymphoid and a few plasma cells; the vessels of the cortex were essentially negative.

The patient was a clerk of twenty-two, married six months before admission; history of lues not ascertained. Two weeks before death a convulsive attack occurred after which he was noisy and restless, and he became unconscious for a few hours, afterward complained of photophobia and headache and talked incoherently. Admitted to the hospital nine days before death; at first he was rather petulant and complaining but felt tired and nervous; except for the error of one week in orientation and some loss of insight he seemed normal. Used for vessel and cortex studies.

Psychiatric Institute — Report of Histological Laboratory.

LONG OR MEDULLARY ARTERY DISORDERS

Ten Cases

Nos. 569, 586, 605, 614, 618, 620, 621, 584, 611, 616

No. 569 *Hudson River State Hospital*.— The brain was rather large, somewhat swollen and slightly distorted in appearance. An old hemorrhagic pachymeningitis compressed the lateral aspect of the right frontal lobe. The pia was turbid generally, hazy looking and quite tough. The cortex was rather swollen. The cerebral arteries were diffusely thickened. A few granulations were seen on the floor of the fourth ventricle. The cranial nerves were free from significant adhesions. The pia of the cord was moderately turbid. Horizontal sections were made through the brain and revealed several small foci of softening in the basal nuclei; one old focus cutting into the middle of the right internal capsule, two others in the right lenticular nucleus; in the left hemisphere two old foci were found in the lenticular nucleus. Microscopically, the pia over the convexity contained a few lymphoid and occasional plasma cells, over the lateral convexity, and particularly over the base the infiltration was extreme. The cortex and cortical vessels were essentially normal over the convexity, but mesially, and laterally in the insular cortex and in the medulla oblongata and cord the vessels contained a considerable number of lymphoid and plasma cells. The cerebral arteries showed a high grade syphilitic endarteritis and periarteritis.

The patient was a man of fifty-four; syphilis at thirty-nine; a transitory stroke of left-sided paralysis at forty-three, afterwards inefficient but worked until forty-five. He became restless, forgetful, erotic and untidy; orientation, memory and retention were impaired; insight and judgment were defective. On admission in 1904, six years before death venereal scars were present; the pupils were contracted and sluggish in their reactions; tactile sense was normal; heat and cold confused; gait unsteady; balancing power poor; marked tremor of facial muscles, tongue and fingers; no speech defect; elbow and patellar reflexes exaggerated; no Babinski reflex. Patient's emotional tone was variable at first, but became more stable. Latterly he stumbled in walking and would fall. Death from enteritis and broncho-pneumonia. Used for cortex, cord and vessel studies.

Psychiatric Institute—Report of Histological Laboratory.

No. 586. *Hudson River State Hospital*.—A small brain with slight thickening of the pia and subarachnoid cysts in the left frontal and post central regions. The convolutions were rather narrow; the vessels grossly were moderately thickened and gray without definite atheroma. No ependymal granulations were found. The pia of the spinal cord was rather gray. A fresh hemorrhage 2 x 2 cm. in size was found deep in the left superior parietal lobule, and on horizontal section various small slits and foci of softening with orange-yellow walls were found on both sides. They occupied the basal nuclei and the subcortex and a few were mainly cortical; all seemed dependent upon vessels of small size.

There was considerable cellularity of the pia which, in a few places, showed foci of very dark lymphoid cells. In the first layer of the cortex there was marked cellular activity and marked pigmentation was also present in the cells, and an increase in satellite cells. There was thickening and poor stainability of the vessel walls, especially in the smaller ones, where it was marked, and splitting of the elastica and a sort of mechanical dissecting apart of the intimal tissues. Occasional fracture of the elastic membrane. Scattered, very dark lymphoid cells and more definite groups of these in the vascular sheaths were not uncommon. The spinal cord was free from degenerations in the fiber tracts.

The patient was sixty-three at death. The psychosis began gradually, about six years previously, with sleeplessness, confusion, depression and hypochondriacal ideas, with the notion that she was to be killed. Her memory was very defective concerning her past life, her grasp was poor, she failed on test words. Hearing was defective in both ears, and smell and taste were impaired. The gait was ataxic with marked inco-ordination, the deep reflexes increased. About a year before death convulsions occurred followed by helplessness. She remained in bed with general weakness but no paralysis. She was usually mildly depressed and confused, wet and soiled herself, and grew gradually weaker until shortly before death when failure was rapid. The case was considered general paralysis, but the microscopic examination did not bear this out. Used for studies in arteriosclerosis.

No. 605. *Willard State Hospital*.—A medium sized, well preserved formalin injected brain, with slight thickening and gray-

Psychiatric Institute—Report of Histological Laboratory.

ness of the pia of the convexity, but little more thickening on the base. Slight whitening of the basal blood vessels. No ventricular granulations either grossly or microscopically. On horizontal section a 3 by 5 mm. softening was found in the right optic thalamus close to the internal capsule, which appeared unaffected by the lesion.

Microscopically, the pia of the convexity contained occasional scattered lymphoid cells, but many pigment containing cells. In the orbital pia there was more infiltrate and some bunching of it, and one anterior cerebral artery showed a slight grade of girdling intimal proliferation, with a few lymphoid cells in the adventitia. There was a thick plaque in the other, and some atheromatous degeneration, but in general the blood vessels showed only slight girdling intimal increase or none at all. In the pia of the medulla oblongata there was a considerable sprinkling of lymphoid and a few plasma cells. The infiltrate was continued down the cord in a rather milder grade and was most marked posteriorly. Progressive degeneration was found in the right pyramid of the medulla oblongata and in the left pyramidal tract in the cord. A still more intense degeneration was found in both the postero-median columns where gitter cells and large spider cells were abundant and the fibers were largely destroyed. The anterior and posterior roots in the lumbar region looked normal.

The patient, a colored servant of thirty-eight, had a psychosis of at least five years' duration. She complained of a talking machine following her, was disoriented for time and had some speech defect. She was irritable, suspicious, abusive and lazy. Five months before death she complained of much headache, and of pain in the knees. Two months later there was weakness of the left face, arm and leg; the tongue went to the left; the left knee jerk was absent but Babinski-sign was present; there was left internal strabismus. Speech and hearing were not affected. Six weeks before death the eyes were unsteady, the tongue went weakly to the left, the pupils were dilated, with fair reaction to light in both and poor reaction to accommodation in the left; the left-sided paralysis was more profound, with no patellar reflex and slight Babinski. Some sensory impairment; the right patellar reflex was present;

Psychiatric Institute—Report of Histological Laboratory.

the organic reflexes were lost. Frontal headaches continued and she sometimes had pain and burning along the spine. Iodide of potash produced no benefit. The tongue tended to fall between the teeth on the right side and was frequently bitten. Four days before death the left leg could not be moved and the left arm was helpless. The patient moaned and complained. She had lost weight. Towards the end she complained of blindness. Death in coma. Serofibrinous pleurisy was found at autopsy. Used for histological study.

No. 614. *Middletown State Homeopathic Hospital.*—The brain was of fair size, the pia moderately hazy and thickened, the convolutions slightly atrophic, but no evidence of cortical softening any place. The cranial nerves were negative; the cerebral arteries were all extremely and diffusely thickened. Multiple small focal softenings (ten) were found in the medullary substance of the two hemispheres and the basal nuclei, one focus cutting into the anterior portion of the left internal capsule; other similar foci were present in the marrow of the occipital lobes and brain-stem. In the latter several old foci were found in the left pyramidal tract bundles, and a more recent focus near the emergence of the left pyramidal tract destroyed it almost completely. Several small foci were seen in the medullary substance of the cerebellum. The arteriosclerosis was essentially of a syphilitic type, but an atheromatous transformation of the endarteritic vessels was probably superimposed.

The patient was a man of sixty with a history of two previous attacks, one five and another three years before admission, after which there was physical and mental failure. He became forgetful and his grasp on business details relaxed. A right hemiplegia gradually developed with exaggerated knee jerks, ankle clonus and Babinski-sign on this side. Speech was slow, he fumbled for words and was often unable to reply. There was a decided cardio-vascular-renal complex. Mentally, advanced deterioration with considerable depression and emotional instability and rather atypical aphasic symptoms; definite insane ideas were lacking; some insight retained. Used for vessel and tissue studies.

Psychiatric Institute — Report of Histological Laboratory.

No. 618. *Middletown State Homeopathic Hospital.*—A good sized brain with moderate general atrophy; the pia was thick and white on the upper convexity, slightly more so on the left side. The basal blood vessels were grayish-white and atheromatous, rather diffusely so. The lobes separated easily. The right middle cerebral artery was thickly studded with atheromatous spots and was diffusely thickened. On horizontal section lacunar foci were found in the marrow beneath the right angular gyrus, in the posterior limb of the right internal capsule, and in the marrow beneath the gyrus fornicatus. No ependymal granulations were seen.

Microscopically, the large blood vessels showed a girdling intimal process with splitting of the elastica and destruction of the same in the atheromatous areas. In the smaller vessels there was merely splitting of the elastica. There was a scanty lymphoid cell infiltrate of a patchy character in the adventitia over the atheromatous areas, but also elsewhere.

The patient, a salesman of eighty at death, was admitted at sixty-seven. There was insanity in the family. The patient frequently broke down before the final attack. He worried and fretted about family affairs and grew more morose. He was unsteady, tired easily, had defective vision, poor circulation, and poor appetite. His head felt thick and dull, and he was unable to concentrate on anything. He improved at first and finally became clear but did not feel well. He was discharged but returned in a few months, insisted that his bowels would not move normally; chilliness, and a tired feeling in his head and eyes, were among his complaints. He grew more sluggish, complained of vertigo at times, and presented well marked general arteriosclerosis. Two fainting attacks occurred six years before death, and he went to bed when it was difficult to rouse him for some time. Four years before death another fainting attack (no details). Blood pressure 200 at times. Occasional episodes of confusion. He was untidy, his memory was unsafe, sluggishness and feebleness increased. The left arm and leg became weak, the left toe was dragged, and the left knee jerk increased. After this he had to be helped in walking. Cystitis developed and persisted. A year be-

Psychiatric Institute—Report of Histological Laboratory.

fore death he was unable to understand and hardly spoke. Some stiffness came on in the left leg. There was retention and dribbling of urine. There was lack of interest and essentially helplessness for a month before death. The clinical diagnosis was involutional melancholia; later changed to vascular disease. Used for studies in arteriosclerosis.

No. 620. *Binghamton State Hospital*.—A medium sized, moderately atrophic brain which showed much general thickening and grayness of the pia of the convexity, and less of the base; considerable atheroma of the large basal blood vessels, slight atheroma in their main branches; no ependymal granulations. Horizontal sections showed small pits of softening, one in the left putamen, and several in the left optic thalamus, none were found in the right thalamus or elsewhere in the brain stem.

Microscopically, the frontal cortex showed a thick pia, some shrunken spider cells in the first layer, and much greenish pigment. A thin, rather loose layer of proliferated intimal tissue girdled some of the blood vessels in the pia of the gyrus rectus.

The patient was a man of seventy, with little available history. His psychosis began ten days before admission. He said he thought that if he could get some patent medicine, wings would grow on him. He was oriented, but talked to himself, was depressed, without insight, and at times somewhat amnesic. He deteriorated gradually physically and mentally, became bedridden and died of chronic endocarditis. Used for studies in arteriosclerosis.

No. 621. *Binghamton State Hospital*.—A rather large, slightly atrophic brain, with a moderately thick gray pia, decided atheroma of the basal vessels, and atheromatous beading of the cortical branches. On horizontal section various small softenings were found in the deep marrow and one in the left putamen, and one beneath the arm or face area of the right anterior central convolution was about eight by ten mm. in diameter; the right internal capsule was somewhat discolored.

The patient, aged sixty-five, with a diagnosis of senile psychosis, had been a good moral bookkeeper. Three years before death he became despondent, uncleanly, dazed, slow and rather stupid. He mixed up his dates and wandered about. The right pupil was

Psychiatric Institute—Report of Histological Laboratory.

larger than the left, both reacted. There were residuals of a left hemiplegia of unknown date, consisting in a weakened left grip, slight atrophy of the left arm and leg, exaggeration of the left knee jerk, and a doubtful Babinski-sign. The speech was thick and the tongue went to the left. Death occurred from broncho-pneumonia. Used for studies in arterio-sclerosis.

No. 584. *Kings Park State Hospital*.—A good-sized brain with general grayness and thickening of the pia, especially on the upper convexity, and slight atrophy. The basal blood vessels showed much diffuse atheroma and decided stiffening. In the vessels of the convexity no atheroma was noticed. Horizontal section showed numerous lacunar softenings in the caudate and lenticular nuclei with involvement of the anterior limb of the internal capsule on both sides. There were also softenings in the optic thalami; one in the right thalamus encroached strongly on the internal capsule. No foci were seen in the deep marrow, corona radiata or cortex. A large fresh hemorrhage was found in the left side of the mid-brain at the level of the anterior corpora quadrigemina. There was much swelling and distortion around it; it extended longitudinally below the middle of the pons. On the right side a lacunar focus cut through the mesial fillet.

The patient, a printer of forty-seven, sociable and a moderate drinker, had an attack of semi-consciousness about five years before death and two years before admission to the hospital, but recovered in twenty-four hours. Syphilis was denied. A year later he stopped work, his speech was indistinct, his gait rather unsteady, but after hospital treatment for eight weeks he was discharged. Shortly after this he was evidently insane, planning to travel, to establish a large business, and making accusations against his wife. At the hospital his gait was shuffling and rather spastic, the knee jerks were exaggerated, Babinski-sign was inconstantly present on both sides. There was speech defect, the handwriting was irregular and ill-formed; lumbar puncture was negative. He was abusive, irritable or lachrymose by turns; orientation and memory were fair. Early in 1910, about three years after the onset, sudden vomiting began, followed by coma and death without a return to consciousness. Used for studies in arteriosclerosis.

Psychiatric Institute—Report of Histological Laboratory.

No. 611. *Gowanda State Homeopathic Hospital*.—The brain weighed 1,145 grammes, the pia was only slightly hazy. There was a moderate degree of general atrophy; the basal vessels were moderately atheromatous; multiple focal softenings were present in the medullary substance of the cerebral and cerebellar hemispheres and brain-stem; one of these cut through the anterior limb of the left internal capsule, another through the middle of the posterior limb. The lesions in the right hemisphere were smaller and more numerous and scattered. In the brain-stem a small focus destroyed the outer half of the left mesial fillet.

The patient was a housewife of sixty-six, her psychosis began at sixty-one with complete change in disposition and conduct, displayed undue interest and activity in other people's interests, later became uneasy, fretful, dissatisfied, slept poorly, often talking and screaming until morning; was delusional, accusing others of ill-treatment and dishonesty, and blaming her husband for everything. On admission, at sixty-four, emaciated and exhausted; second heart sound accentuated at apex; blood pressure 180; marked albuminuria. Mentally somewhat elated; talked rapidly in which thought and sound associations were present; sang songs; ran about the ward uncovering patients and rolled under the beds. Orientation and memory satisfactory. Patient heard voices at night. Two years before death complained of great pain in her legs and groins, drew up her legs, and in this position contractures gradually developed. A hemiplegia of the left side beginning in the arm gradually developed and involved the whole side; no loss of consciousness; no anæsthesia; left knee jerk increased; left-sided Babinski-sign; swelling of left arm and contractures of this extremity also. Another stroke with dysphagia occurred three months before death; expression of suffering, mouth open, tongue protruding. Used for vessel and tissue studies.

No. 616. *Gowanda State Homeopathic Hospital*.—A medium-sized brain with a boggy thick tough pia and general atrophy most marked in the frontal parts. Some diffuse thickening and grayness of the large blood vessels. No ependymal granulations. On section numerous small pits of softening were found in the lenticular nuclei and both thalami, and a larger, 7 by 8 mm. softening

Psychiatric Institute — Report of Histological Laboratory

occupied by a fine web-like tissue was situated in the right optic radiation beneath the angular gyrus.

Microscopic examination showed numerous small lacunar foci of various ages and patches of rarefaction in the basal nuclei and in the right internal capsule, with marked arteriosclerotic and fibrous changes, combined in places with colloid-calification, in the walls of the perforating arteries.

The patient, an emaciated man about forty-five, was admitted a week before death with a history of having been bedridden, paralyzed and unable to talk. He was unconscious while in the hospital. The pupils were prompt, the reflexes exaggerated, more so on the left, and there was a left Babinski-sign. There was difficulty in swallowing, loss of sphincter control, and arteriosclerosis. At the autopsy nephritis and cirrhosis of the liver were found. Used for studies in arteriosclerosis.

CORTICAL ARTERY DISORDERS**Three Cases**

Nos. 589, 593, 598

No. 589. *Long Island State Hospital.*—The brain was of moderate size, the pia was slightly thickened, rather turbid and boggy looking. The cortex was granular looking due to numerous small cortical softenings; this condition was most marked in the mid-lateral convexity of the right hemisphere. The small local cortical vessels were markedly thickened and the larger cerebral vessels were moderately sclerotic. The vessel changes strongly suggested the specific type of endarteritis obliterans. Over the pons and beneath the pia was a comparatively recent hemorrhage. The pia was essentially free from both lymphoid and plasma cells; the cortex in the right mid-central and frontal region was much devastated by small wedge-shaped foci of softening.

The patient was a carpenter of fifty-five, admitted two months before death; he was much deteriorated. Vision was defective; hearing impaired; sensibility intact. There was marked tremor of the hands and tongue, spastic paralysis of the left arm, weakness of the left leg; a doubtful Babinski-sign was present on this side also. The inguinal and cervical glands were enlarged; marked acne rosacea was present and an extreme degree of peri-

Psychiatric Institute — Report of Histological Laboratory

pheral arteriosclerosis. For one week previous to death the patient was very drowsy. Used for cortex and vessel studies.

No. 593. *St. Lawrence State Hospital*.—The brain weighed 1,330 grammes, the pia was clear, the convolutions were not atrophic. A number of small cortical pittings, softenings, were present in the posterior parts of L.T.₁ and L.T.₂ and several somewhat larger foci in a diametrical area, the posterior part of R.T.₁; all these foci involve the apices of the convolutions, closely resembling, if not identical with, lesions produced by trauma. The cerebral arteries showed a girdling type of endarteritis, probably syphilitic, and a slight degree of adventitial infiltration with lymphoid cells.

The patient was a woman of fifty-nine, an inmate of the Clinton County House from 1895–1901, during which time she had an apoplectic stroke which left her almost helpless, being unable to get about unless assisted. Nine years before death she became boastful and expressed ideas of wealth, wandered about at night, thought the bed was full of pins; patient was totally blind, reflexes slightly exaggerated, speech satisfactory and pupils normal; no deterioration described. Death from broncho-pneumonia. Used for vessel and cortex studies.

No. 598. *New Jersey State Hospital*. (*Dr. Hammond*.) Cerebral syphilis. Sections only. The case showed the small blood vessel alteration described by Nissl. The changes were not widespread but were seen only in a few places; the ependymal and subependymal surfaces were frequently involved in an intense inflammatory reaction. Abstract not received. Used for studies in cerebral syphilis.

TUMORS OF THE BRAIN**Six Cases**

Gliomata, 567, 556, 590.

Endothelioma, 613.

Lipoma and cystoma, 604.

Tubercular node, calcified, 619.

No. 567. *Hudson River State Hospital*.—A large brain with a lobular tumor (a glioma) about the size of an English walnut in the right temporal lobe underlying RT₂ and T₃. The tumor

Psychiatric Institute — Report of Histological Laboratory

contained yellowish or gelatinoid areas of degeneration and small hemorrhages. The convolutions were flattened and dry, the pia thin but hazy. There was encroachment on the right third nerve, the pons was flattened and the region of the uncus was crowded far toward the median line.

The patient was a waiter of forty-eight who died about ten weeks after admission. It was not known when his psychosis began, but queer actions and difficulty in finding words were first noticed, though he himself thought his trouble began with headache and difficulty of thought about three months before death. There was no writing or speech defect, except the difficulty in finding words, and he was fairly oriented. The deep reflexes were moderately exaggerated, there was slight ptosis of the right lid; no sensory disturbance. Ataxia came on later, with difficulty in thought, and finally he was unable to give his name. Ankle clonus developed, most marked on the left, the right pupil became dilated, rigid, and both optic discs were swollen. The left pupil responded slightly. Occasional clonic spasms occurred in the body and limbs. Death from oedema of the lungs. Used for studies in the brain tumor group.

No. 556. *Binghamton State Hospital.*—The brain was of fair size, the pia was drawn tightly over the convolutions which were much flattened toward the frontal poles; in the latter region and also over the temporal lobes were numerous small cortical granulations. A glioma occupied the interior of the right temporal lobe and the inferior portion of the basal nuclei, involving, from before backward, the insular and subinsular cortex, the anterior third of R. T., and neighboring frontal and orbital cortex, more posteriorly the lenticular nucleus, the deep narrow of the temporal lobe and uncus region, the internal capsule, optic thalamus and external geniculate body and it terminated posteriorly in the right dorsal half of the mid-brain and medulla.

The patient was a man of forty-one, epileptic for years. About four years previous to death he complained of headaches and vomiting and attacks of confusion. Fifteen months before death he developed a weakness of the left arm and leg; memory, retention and power of application were reduced, and the patient be-

Psychiatric Institute — Report of Histological Laboratory

came despondent and dull, at times violent. On admission, one year before death, he complained of left-sided numbness, sensation was intact at this time, but two months later, loss of temperature sense was observed on the left side. Weakness of the left arm and leg persisted and double ankle clonus and left-sided Babinski were present. Some time later left-sided hemianopsia with choking of the discs and Wernicke's pupillary sign were noted. Toward the last there was a marked tendency to fixity of both the head and eyes with difficulty in swallowing. Death resulted from brain tumor. Used for tumor studies.

No. 590. *Dr. H. Hoppe, Cincinnati, Ohio.*—The brain-stem and cerebellum were received in formalin and transverse sections were made through the mid-brain, pons and cerebellum. The tumor was a richly cellular infiltrating glioma, 2 x 4 cm. in diameter, scant in neuroglia fibril production. It involved the corpora quadrigemina almost symmetrically and the floor of the Sylvian aqueduct. The extent of the tumor anterior to the level of the fourth pair of nerves was not ascertainable. Its posterior extent was most marked on the left side where it had grown backward into the left cerebellar hemisphere laterally along the superior cerebellar artery, and to a slight extent it invaded the left pons-cerebellar arm.

The patient was a school girl of seventeen, always ill as a child, weighed 100 pounds at five. At sixteen complained of paroxysmal headaches and double vision and progressive failure of sight; her gait became staggering with reeling toward the right side; without loss of consciousness would occasionally lose control of all her muscles and drop to the floor; vomited daily. Ten weeks before death bilateral optic atrophy and choked disc. There was paralysis of the external and internal recti of the left eye and paralysis of the external rectus of the right eye, inability to turn either eyeball upward; no ptosis; pupils equal in size; no light response; no weakness of face, tongue or pharynx; no anaesthesia in distribution of the fifth nerve; no ataxia or weakness of the arms; slight weakness of the right leg, none of the left; reflexes normal; static ataxia with a greater tendency to fall toward the right side; inability to walk without falling backward. Death after a sudden attack of coma. Used for tumor tissue studies.

Psychiatric Institute — Report of Histological Laboratory

No. 613. *St. Lawrence State Hospital*.—The brain weighed 1,225 grammes, the pia was clear. A globose endothelioma 5 cm. in diameter was imbedded in the upper left central region, it displaced the paracentral lobule downward and outward without materially destroying the underlying tissue.

The patient was a woman of sixty-four; an uncle insane, her habits intemperate. First admitted in 1892; successively in Kings County Asylum, Kings Park State Hospital, and St. Lawrence State Hospital. She talked continuously about her husband and child being murdered; stood at the window, calling at the top of her voice different people by name. Her general attitude was pleasant and agreeable. No cerebral tumor symptoms were present. A uterine tumor of large size was present, not considered operable. Used for tumor studies.

No. 604. *Willard State Hospital*.—A medium-sized, distorted brain with a thin, clear pia except over the basal aspect of the cerebellum and pons, where it was thicker and yellowish. The corpus callosum was almost absent, being represented only by a rudimentary pear-shaped body with the stem downward, 6 by 8 mm. in diameter. Just in front of this was a tumor deeply imbedded chiefly in the convolutions of the right hemisphere and to a less extent in those of the left. It appeared to displace the convolutions rather than to destroy them. The anterior part of the tumor was largely cystic in character, but the walls of the cyst were in places thickened by a considerable amount of fatty tissue which constituted the posterior part of the tumor. Whether the cyst communicated in the depths with the right lateral ventricle was not established (serial sections to be made), but the lining was considered to be ependymal on microscopic examination. There were small pits on both temporal lobes where minute cerebral herniae had been pulled out, and granulations on the ependymal surfaces. Grossly the blood vessels were but little thickened and slightly atheromatous. The optic nerves could not be made out on account of extensive laceration of the basal aspect.

Microscopically the pia and cortex of the cerebral hemispheres were essentially negative, but a massive exudate of lymphoid and

Psychiatric Institute — Report of Histological Laboratory

plasma cells and some polynuclears covered the pons, although the pons substance was little invaded, and the subjacent neuroglia reaction was slight. The small vessels were thick and fibrous; in the larger ones the intima was sometimes raised by a layer of cells beneath it. This exudate, consisting mostly of lymphoid and plasma cells, was continued in a thick layer down the pia of the spinal cord, especially posteriorly, where many large giant cells were found, chiefly in the cervical region; here the vascular endothelium was swollen, and there were occasional examples of proliferative endarteritis. The exudate diminished on going downward, but was still considerable in the lumbar region. Weigert's myelin sheath stains showed no degeneration in the fiber tracts or nerve roots, but some thinning all round the periphery of the sections (technical?).

The patient, a well-nourished laborer of forty, denied syphilis and alcoholism, but he knew little English, and cooperated poorly. He had been epileptic at the age of thirteen, then for a while the epilepsy ceased, to return again later. His psychosis of about two years' duration began with confusion, hearing of sounds and voices, complaints of headache and saying that he was "sick in head," notwithstanding this he was euphoric. He had a fair memory, but orientation for time and place was impaired. The left eye could not be completely closed and there was slight conjunctivitis and slight external strabismus. The pupils were irregular, the reaction was sluggish, the fields could not be determined. There was left facial paralysis, with drooping of the mouth and the tongue went to the left. No other paralyses were found, but in walking the legs were kept wide apart, and there was some swaying. The reflexes were thought to be decreased. Nothing unusual was made out in the other special senses or in general sensation. In the last two years of life convulsions were occasional or sometimes more frequent and coming on in series. There was little mental change after admission, but his eyesight was soon completely lost, and gradually the use of his limbs became impaired, until eight or nine months before death he was almost entirely helpless. Death occurred after a series of convulsions. Used for series, to study the relations of the rudimentary corpus callosum, the cystic tumor, etc., and for tissue study.

Psychiatric Institute — Report of Histological Laboratory

No. 619. *Central Islip State Hospital.*— A good-sized brain in which the two cerebral hemispheres looked symmetrical, with slight thickening of the pia and slight atrophy, and slightly thickened blood vessels. There was a very hard calcified tumor 13 by 15 mm., and surrounded by tough fibrous tissue, embedded in the right side of the lower half of the pons, and destroying the pyramidal fibers; the right pyramid was small, gray and depressed. In the spinal cord the left half was smaller, especially the lateral columns, and a fiber stain showed moderate thinning of fibers in the left crossed pyramidal tract, the fibers of which often ran obliquely, or in disorderly whorls.

In the cortex there was some thickening of the pia and of some of the small blood vessels; considerable pigment in the large nerve cells; little neuroglia reaction, and no infiltration or inflammatory change.

The patient, a middle-aged man, had a psychosis of about twenty-four years' duration characterized by melancholia and a somewhat stuporous demented and careless condition. The left leg was smaller and three inches shorter than the right; it was paralyzed and everted, and the left knee-jerk was exaggerated. He had an old tubercular process which became active and caused his death. He was considered a case of primary dementia. Used for histological study.

V. CENTRAL NEURITIS**One Case****No. 544**

(See also No. 615, in the group of cerebral syphilis.)

No. 544. *Manhattan State Hospital, Institute Service.*— The brain was of medium size and looked normal with the possible exception of slight atrophy; the blood vessels were thin, and no ventricular granulations were seen.

In the paracentral lobule a varying but marked grade of axonal alteration was found, and the same changes were found in some of the medium-sized pyramids in other regions. There was a scanty and inconstant sprinkling of lymphoid cells in the pia of many of the other sections. The autopsy showed emaciation, slight

Psychiatric Institute — Report of Histological Laboratory

atrophy of the brain with a supposed exudate on the convexity, ulcerative colitis, left pleurisy, and multiple mycotic renal infarcts.

The patient was twenty-three and of normal constitution. Psychosis: This developed six months before death immediately after the birth of a still-born, seven-months child, but she had had severe headache for two or three days preceding. A series of convulsions came just after delivery. She was restless at first, but later quiet and stuporous. Four months after the childbirth she was admitted to the Institute Service in a mute condition, took little food, did not respond to pinpricks, had albumin in the urine. One month later she said she was paralyzed, had been kept in a trance, seen devils, and other fantastic experiences were recounted. She grew thinner but talked more freely, and complained of peculiar feelings, that she was a goat or a horse. On the day of death, three months after admission, she realized that she was dying, said it took very long, that everything had been done to help her. There was no rigidity or twitching except an occasional twitch of the upper lip. The clinical diagnosis was infective exhaustive psychosis. Used for histological studies.

vi. TRAUMATIC LESIONS**Three Cases**

Nos. 599, 553, 557

(See also No. 602, under General Paralysis, Group A, and No. 565, under Epilepsy.)

No. 599. *Willard State Hospital*.—The brain was rather small, the pia slightly hazy, the convolutions somewhat atrophic, the cerebral arteries extremely atheromatous. In the middle third of LT₂ was a linear softening with spongy rust-colored walls resembling, if not identical with, lesions of a traumatic character, the underlying medullary substance was also considerably destroyed. Another focus of softening 6 mm. in diameter was present in the middle of the posterior central convolution.

The patient was a right-handed laborer of sixty-one with a common school education. About a year and a half before death he fell on the back of his head, was unconscious one hour, and after-

Psychiatric Institute — Report of Histological Laboratory

ward there was considerable difficulty in speaking. After the accident he had six epileptiform convulsions, the last a month before admission; he was unable to work, became restless, suspicious and suffered from hallucinations. On admission, eight months before death, orientation, memory and grasp were very defective; he understood with much difficulty repeated requests, but he repeated words and sentences quite readily; he picked out with ease indicated objects, but was unable to name them correctly; spontaneous speech was paraphasic; calculation was defective; recognition of mimicry was good, of printed and written words only fair; he scrawled only when asked to write but was able to copy letters and figures fairly well; when accompanied he was able to sing a little. Physical examination: Smell and taste were decidedly defective and vision was poor, possibly a right-hemianopsia; hearing was also defective; the tongue deviated slightly toward the right, the right face was weak and flat, there was slight Romberg-sign, but no Babinski-sign. Three days before death right-sided convulsions occurred followed by spasticity and then flaccidity on that side; both pupils were dilated, the eyes were turned toward the left, the head to the right. Used for a partial series.

No. 553. *Hudson River State Hospital*.—The brain was rather soft, the pia moderately hazy. Several rust-colored softening involved the apices of the convolutions in the left parietal region, and, in the right basal region, affected particularly the right temporal tip, orbital cortex and cornu ammonis. Microscopically, characteristic tissue changes, peculiar to traumatic injuries of the pia and cortex were present.

The patient was a miner, and more recently an engineer of thirty-eight. Three months before death he received a severe injury to the head which fractured the skull in the left parietal region, and rendered him unconscious; afterward the left upper extremity was moved constantly and was spastic; the patellar reflexes were absent. He was admitted three weeks before death in a confused condition; he lay curled up in bed with his thighs flexed on his abdomen, and the legs on the thighs; the arms were flexed across the chest, the body and head bent forward, the eye-

Psychiatric Institute — Report of Histological Laboratory

lids closed, and the features distorted; cutaneous sensibility was diminished on the right side. Sometimes he was dull, sometimes restless, tearing his clothing and yelling at the top of his voice. Lumbar puncture showed nine to twelve lymphocytes per field. Used for cortex studies.

No. 557. *Binghamton State Hospital*.—The brain was of moderate size; the pia was slightly hazy and thickened over the convexity and base; the convolutions appeared slightly atrophic. Yellowish cortical erosions, traumatic in character, involved the gyri recti of both orbital lobes and the cortex immediately lateral to each; two similar softenings involved the basal portions of both L.F.₃ and R.F.₃. Microscopic examination showed these softenings to have affected the apices of the convolutions almost exclusively, the lateral walls having escaped; leading from these apical wedges of softening were pale tracts of nerve fiber degeneration. The pia and vessels were not remarkable.

The patient was a man of sixty-two, epileptic for thirty-three years, and in different State hospitals for the past seventeen years; he had two or three epileptic seizures weekly. He was disoriented, dull, stupid and demented. About nine weeks before death he had a severe convulsion after which he never fully regained consciousness, and there was weakness of the left side, exaggeration of reflexes and slight ankle clonus, but no Babinski-sign. His sphincters were uncontrolled. Death resulted from bronchopneumonia. Used for lesion and cortex studies.

MENINGITIS**Five Cases**

Nos. 578, 579, 580, 582, 545

(See also No. 563 under General Paralysis, group d, No. 564 under the same heading, group b, and No. 565 in the epileptic group.)

No. 578. *Central Islip State Hospital*.—A large brain with some compression and flattening of the convolutions, a diffusely spread, turbid, light gray pial exudate with some small spots in it, and no focal lesions. No ependymal granulations were found.

The cortex showed no infiltration except that there were occa-

Psychiatric Institute — Report of Histological Laboratory

sional extensions from the pia along the vessel sheaths. There was an abundant fibrino-purulent exudate in the pia consisting of polynuclear and mononuclear cells. In some instances similar cells were found between the intima and elastica of some of the blood vessels. Plasma cells were rarely seen in the deepest layers. A few micrococci were found in the pus. No clinical abstract requested. Used for comparative study of different forms of meningitis.

No. 579. *Central Islip State Hospital*.—A large brain with little thickening of the grayish-white pia of the convexity, but much more thickening in that of the base. Moderate thickening but no atheroma of the blood vessels. No focal lesions or granulations were seen, and grossly no tubercles were recognized. The pia of the cord was much thickened.

Microscopically, there was an abundant exudate in the pia of the base, composed mostly of endothelioid polynuclear and lymphoid cells, with a decided tendency to focal necroses, to invasion of the veins and some separation of the intima of the vessels by mononuclear cells. The infiltrate was massive in the pia of the cord, where it showed much necrosis, but the cord itself was free from infiltration. The pia of the convexity also presented much exudate, but this did not invade the cortex except by extension along the vessel sheaths. No endothelial proliferation of the kind usually found in syphilis was seen in the vessels. Tubercle bacilli were abundant in the meninges, especially about the necroses. Clinical abstract not requested. Used for studies in meningitis.

No. 580. *Central Islip State Hospital*.—A fair sized brain with decided exudate everywhere in the pia of the convexity and base, and numerous grayish or grayish-yellow tubercles, especially on the left convexity. The cranial nerves were imbedded in the basal exudate. The ependymal surfaces were uneven, but not granular.

Microscopically, the exudate contained many endothelioid cells, polynuclears and lymphoid cells, and phagocytosis was prominent. Giant cells were not seen. The vessels did not show anything resembling a syphilitic endarteritis, but in places the intima was raised by a collection of cells beneath it. The cortex was clear except for slight extensions along the sheaths of the vessels enter-

Psychiatric Institute — Report of Histological Laboratory

ing from the pia. Tubercle bacilli were abundant in the pia of the left frontal region. Clinical abstract not requested. Used for studies in meningitis.

No. 582. *Central Islip State Hospital*.—A medium sized brain with a thick yellowish-white exudate in the pia of all regions, and little atrophy. There were two small reddish-brown erosions on the left temporal lobe, and a small steep-walled lesion in the under surface of the right cerebellar hemisphere. The blood vessels were grayish, little thickened and non-atheromatous. The ependymal surfaces were rough but hardly granular.

The microscope showed marked infiltration of the outer layers of the pia with mononuclear, phagocytic and polynuclear cells, while in the deeper layers the exudate contained more lymphoid and plasma cells; the cortex was not invaded except secondarily. In most places phagocytosis was very marked and the inclusions (lymphocytes mostly) were numerous. Necrosis in the exudate was frequent. In the right frontal region a large thrombosed vessel, which was well organized, was found, with a wedge of partial softening beneath it, in which was a marked spider cell reaction, and many rod cells. An occasional very large plasma cell with several nuclei was seen. Near the thrombosed vessel a smaller rechanneled one was found. The larger blood vessels in general, showed only a fine splitting of the elastica, with an abundant exudate coming up to the adventitia, but little actually within it. Some of the vessels of the pia showed a thickened completely girdling intimal layer, but the band was thin. The reaction was not clearly specific. The temporal erosions were old wedges, with absence of nerve cells, many spiders, but no gutter cells, and much phagocytosis in the pia over them. The cerebellar lesion was old and destructive, the framework of the folia being preserved only by a hypertrophied Bergmann's layer, after complete disappearance of the Purkinje cells and the granules. Tubercle bacilli were not found, but numerous blue staining bacilli were found in places in the phagocytes.

The case was regarded clinically as meningitis, following typhoid fever of long duration. The clinical abstract was not requested. Used for studies in meningitis.

Psychiatric Institute — Report of Histological Laboratory

No. 545. *Buffalo State Hospital*.—The brain was of medium size and flattened, with a turbid yellowish exudate in the pia of the anterior and upper half of both cerebral hemispheres and little elsewhere; retracted normal looking arteries and normal ependyma.

The microscope showed, in the anterior parts of the brain, many polynuclear leucocytes and much fibrin in the superficial layers of the pia; also many diplococci. In the deepest layers lymphoid plasma and endothelioid cells predominated. There were extensions along the vessels into the cortex, which was otherwise free. The medium sized vessels showed in a few places intimal proliferations of slight grade in fairly firm plaques, but the large vessels, with the exception of an occasional plaque, were essentially normal. No ependymal granulations were found.

The patient was a temperate manic-depressive case, aged thirty-nine, without evidence of syphilis, admitted in the eighth manic attack. Excitements had been the rule in her psychosis and the attacks had occurred about every two years. In the latter part of her last attack she was mildly depressed, poorly nourished and somewhat anaemic. The pupils were equal and reacted; there was some exaggeration of the knee jerks, and slight tremor of the tongue and fingers. Six days before death lobar pneumonia was discovered; her temperature ranged between 103.4 and 105.6. There was delirium and coma on the day preceding death. At autopsy the heart was essentially negative. There was gray hepatization of the right lung, and the pneumococcus was found in a culture from the meninges. Used for studies in meningitis.

viii. EPILEPSY**Two Cases**

Nos. 565, 560

No. 565. *Middletown State Homeopathic Hospital*.—A medium sized brain with moderate thickening and haziness of the pia, some rustiness on the lower surface of the right cerebellar hemisphere, and cloudiness and turbidity in the pia of this region. The basal vessels were regular, no ventricular granulations were seen. An acute inflammatory exudate covered the spinal cord, and there was a shallow depression, a result of trauma, between C₄ and C₅.

Psychiatric Institute — Report of Histological Laboratory

with slight yellow discoloration at this place. The brain stem was sliced for Marchi's method, and slices were taken from each segment of the spinal cord. The latter showed marked descending degeneration in the pyramidal tracts, greater on the left side, a faint comma tract degeneration and some degeneration in the descending cerebellar tracts, but rather little in the ascending cerebellar systems except Gowers' tract, which was considerably degenerated on the left side. There was a marked purulent meningitis about the spinal cord, but the vessels within the cord substance were clear.

In the cortex the pia was very cellular, containing occasional polynuclears and rather numerous endothelioid cells which, at times, showed mitosis. Among these cells plasma cells were rarely seen. The pia was usually not infiltrated. The neuroglia was not unusual except for some increase of small spiders; there was some probable increase of satellite cells. In the cerebellum the pia was also very cellular but not infiltrated to any great extent with inflammatory elements. In Bergmann's layer and elsewhere there were spider cells without plain increase in number. The blood vessels were thickened, with a rather swollen looking endothelial layer and occasional slight splitting of the elastic lamina. Some inclusions were found in the endothelioid cells in the pia.

The patient was a domestic of forty-one, several of whose relatives (mother, brother, cousin) were epileptic. She herself had been epileptic since childhood, and was dull and stupid at the age of twenty-two, although quite excitable and easily frightened. She averaged two to fifteen convulsions a month. Taste and smell were not especially affected. Nine weeks before death she was found unconscious on the floor, and complained of pain in the neck, arms and legs. The arms were helpless but the legs were moved a little, and the breathing was quick and catchy. There was no response to pin pricks below the shoulders, except in the left leg and foot. Three days after this episode the right knee jerk was slightly exaggerated, both wrist jerks were present, and pin pricks were responded to about each ankle. Swallowing, which had been difficult, improved, but the respirations were shallow and gasping. There was retention of dejections. Six days after the

Psychiatric Institute — Report of Histological Laboratory

injury there was anaesthesia from the second rib down, and she grew duller, with a low fever. Sixteen days after the injury there was a severe general convulsion beginning with the right leg, and the eyes turned to the right. There was improvement in breathing and less pain after the convulsion, but no change in the anaesthesia. Her fever gradually increased, bed-sores appeared and deepened, and a peri-rectal abscess appeared. Thirty days before death the right knee jerk was more active, the elbow and wrist jerks were both active, and a plantar reflex was obtained. There was prompt response to galvanic and faradic currents, but no reaction of degeneration. She could move the right leg up and down. Three days later the left leg was painful, and a sacral bed sore was increasing. There was low fever, but this subsided, and the temperature became subnormal about two weeks before death. Ten days before death a large sloughing bed sore with deep cellulitis was present with much pain in the back and left leg. Three days before death a slight convulsion occurred, and a second one two days later, when, after jerking of the right leg, a hard general convulsion appeared. Slight fever, rapid pulse, difficult breathing, typical retraction of the head, rigidity of the neck and stupor came on. A day after this she had a temperature of 106. At autopsy the spine was found dislocated between the third and fourth cervical vertebrae. The spines were out of line although the posterior longitudinal ligament was intact. There was a deep sacral bed sore with deep cellulitis and osteomyelitis. The clinical diagnosis was epileptic deterioration, dislocation of the cervical spine, and meningitis. Used for studies in epilepsy, and for study of the fresh lesion by Marchi's method.

No. 560. *Central Islip State Hospital*.—An asymmetrical brain, the left hemisphere being smaller than the right due to a maldevelopment of the left frontal pole, microgyria. The right anterior cerebral artery was extremely small, the left anterior cerebral supplying blood to both vessels; the vessels of distribution to the left frontal pole, both from the left anterior cerebral and left middle cerebral were comparatively smaller than the same vessels on the right side.

The patient was a man of fifty, epileptic since the age of six, admitted to Blackwell's Island at twenty-five, to Manhattan State

Psychiatric Institute — Report of Histological Laboratory

Hospital later, and in 1908 to Central Islip. He was irritable, surly, often assaultive, and he gradually deteriorated; an average of about fifteen convulsions occurred monthly. Death resulted from broncho-pneumonia. Used for gross anatomical purposes.

ix. LESIONS OF THE SPINAL CORD**Three Cases**

Nos. 600, 601, 554

(See also No. 563 under General Paralysis, Group d; No. 564 under General Paralysis, Group b; No. 565 under Epilepsy, and No. 605 under Cerebral Syphilis.)

No. 600. *Dr. Ward A. Holden.*—Fragments of the cervical cord. The specimens were much swollen and the cut surfaces bulged excessively. There were numerous punctate hemorrhages practically confined to the gray matter, and a little more evident on the left side.

The microscope showed extensive acute softening with granule cells, considerable blood, and a perivascular infiltrate in the vessels of the softening and adjacent to it with lymphoid cells and dark cells of smaller size than the usual lymphoid cells.

The patient, a woman of thirty, about five months before death had blurred vision in the left eye, and in a few days this eye was blind, but improvement set in, continued for about one month and then the eye remained stationary. She was then in good health until about one month before death, when paraesthesias in the extremities occurred, with pain in the shoulders and stiffness in the legs with anaesthesia and difficulty in walking. Three weeks later she was unable to walk and had shooting pains in the back of the neck and occipital region. Paralysis of the left arm followed this in a few days, and a few days later the right arm became paralyzed. The paralysis was flaccid. Catheterization was necessary. There was a diminished reaction to light in the pupils which were unequal. Vision in the left eye was 20/200; in the right 20/30. The left disc was moderately pale, especially in the temporal portion, and the outline was slightly blurred. The breathing became thoracic and the legs were completely paralyzed.

Psychiatric Institute — Report of Histological Laboratory

The sensory features varied, though touch was good; pin pricks were usually felt, heat and cold were invariably "warm" on the legs; the knee jerks and Achilles jerks were present, but the reflexes in the arms were absent. There was a double clonus and Babinski-sign. As the patient was rapidly deteriorating, operation was undertaken. The dura was found pale and pulsating, the cerebro-spinal fluid was abundant, the patient's condition was very poor and the wound was closed. The Wasserman reaction was negative, and there were no lymphocytes in the cerebro-spinal fluid. Used for histological study.

No. 601. *Dr. Ward A. Holden.*— Portions of the cervical and upper thoracic cord were received. There was much swelling of the segments, but the cut edges did not mushroom very much. A white softening was found involving both the gray and white matter and affecting chiefly the right side in the upper portion of the cord, but crossing to the left side lower down.

Microscopically, the lesion showed many granule cells, increase in the number of blood vessels, a moderate infiltration with small dark cells in the sheaths of many of the vessels within the softening, and in its neighborhood. There was little change in the pia although occasional slight infiltrations with lymphoid cells were seen. The softenings in extending toward the surface of the cord followed the lines of the blood vessels.

The patient was thirty-eight. One week after childbirth there were pains in the back, retention of urine, stiffness and paraesthesia of the legs, soon followed by loss of feeling over the lower half of the body, the arms at first being free. She was able to walk about two weeks later, but sensation was suddenly lost in the upper half of the body. The knee jerks were normal, the Achilles jerks present. There was tenderness on pressure over the second and fifth cervical vertebrae. The eye examination was negative, except for slight pallor of each optic disc. The general condition grew worse, and about five weeks after childbirth there was a well marked Babinski-sign, and anaesthesia and analgesia extending about to the clavicles. About a week later the knee jerks had disappeared. None of the limbs could be moved, the head movements, however, were normal. The breathing was entirely

Psychiatric Institute — Report of Histological Laboratory

thoracic, and there was an almost constant hiccough. The Babinski-sign was greater on the left than on the right. She was operated on, and the lower cervical and upper thoracic cord was exposed, and the wound closed. Death occurred next day. Used for histological study.

No. 554. *St. Lawrence State Hospital.*—The brain was of medium size; the pia was clear; the brain cortex was remarkably pale, resembling a formalin injected brain. The cord showed degeneration of the posterior and lateral columns, the degeneration being the most extensive in the distal extremities of the fiber tracts, particularly was this true in the posterior and lateral columns of the cord.

The patient was a woman of fifty-eight; a brother died of general paralysis. About two years before death, after an episode of exhaustion, the patient complained of numbness in the lower extremities and was unable to walk. Because of paranoic development she was committed. There was marked anaemia, the red blood corpuscles numbered two and a half millions, among which were nucleated red cells. There was ptosis of the right upper lid and lateral nystagmus, impairment of cutaneous sensibility on the right, later on the left side; increased patellar reflexes and spasticity of the extremities, propulsion of the feet forward on standing, also swaying and occasional falling; failure of the peronei muscles to react to the faradic current; a feeling of numbness of the lower extremities, especially marked over the buttocks. Lumbar puncture was negative. Death from pernicious anaemia. Used for studies in spinal cord lesions.

X. MISCELLANEOUS GROUP**Nine Cases**

Nos. 576, 622, 592, 573, 572, 559, 588, 609, 591.

No. 576, paralysis agitans.

Nos. 622 and 592, dementia praecox.

Nos. 573 and 572, syphilis of lung and liver.

No. 559, an excitement of short duration.

No. 588, speech disorder, and some vascular sclerosis.

No. 609, Degeneration in one pyramidal tract.

No. 591, a normal case.

Psychiatric Institute — Report of Histological Laboratory

No. 576. *Middletown State Homeopathic Hospital*.—A rather large brain, from a case of paralysis agitans, with thickening of the pia and gelatinoid looking contents in the anterior half of the convexity. Atrophy of the convolutions, slight general thickening, with a little atheroma; no ependymal granulations. In the spinal cord there was thickening and whitening of the pia and cartilaginous plaques in the thoracic portion.

Microscopically, the pia was cellular and thickened, but infiltration was probably absent. There was some pigment about the neuroglia cells of the cortex, and in the nerve cells, and considerable green pigment in the blood vessels. The latter were mostly negative, with the exception of some fibrous changes, especially in the smaller vessels of the medulla oblongata and in the pia.

The patient was a cooper and brewer of sixty-seven; after a fall from a wagon with slight injury to the head, which occurred fourteen years before death, he began to talk of witches, refused to work, and had delusions of reference; his reflexes were exaggerated and he was weak and tremulous. His ideas of reference increased and the tremulousness, which was diagnosed as paralysis agitans, grew more definite, with pill rolling movements of the right hand, the head was held forward, the neck rigid, the arms partially flexed and also rigid. His delusions concerning witches continued to increase. Six years before death the tremor was very marked, the head, arms and legs being involved. When he shook more violently he explained it by saying that he was trying to throw off the witch. There was little impairment of memory, but he grew feeble and wasted away, although his appetite was enormous. Two years before death he could not stand alone but shuffled along with assistance in a rigid condition, and rhythmic movements were practically continuous while awake. The knee jerks were active, the pupils sluggish, there was moderate arteriosclerosis. Later he complained of "fire in his legs" and refused to be covered, except by a sheet, in the coldest weather. Toward the close of life there was increasing feebleness, with a tendency to diarrhoea and bronchitis. At autopsy there was wasting of the muscles, bed sore and cellulitis. He died of pulmonary oedema. Used for tissue studies in paralysis agitans.

No. 622. *Manhattan State Hospital*.—A medium-sized, par-

Psychiatric Institute — Report of Histological Laboratory

tially complete brain, the middle third of the left hemisphere being missing. The pia was slightly thickened and gray; the basal blood vessels were small, moderately thickened and whitened. There was a fresh softening in the left corpus striatum extending somewhat beyond its lateral limits. A small softening destroyed part of the supramarginal gyrus and reached to the depths of the optic radiation without apparently injuring the latter. The blood vessels had been removed with the part of the hemisphere that was missing.

The patient, a fairly developed woman of twenty-eight, admitted about seven years before death, was somewhat defective from childhood. The duration of her psychosis was not known. Her skull was somewhat larger on the right, there was some opacity of the left cornea, but the pupils reacted. The deep reflexes were moderately exaggerated, orientation was good and insight lacking. There was a harsh murmur at the apex and a thrill. Three years after admission a diagnosis of tuberculosis was made, but later examination placed this in doubt. Oedema of the face, hands, ankles and abdomen was noticed two months before death. The day before death she was stuporous. The clinical diagnosis was dementia praecox and mitral stenosis. The autopsy showed softening in the anterior half of the right first and second temporal convolutions, chronic mitral stenosis, chronic parenchymatous nephritis and general anasarca. Used for tissue study.

No. 592. *Manhattan State Hospital*.—A case of dementia praecox in which sections only were received. Used for microscopic study and comparison with normal cases. Some clumping and apparent increase of the neuroglia nuclei, and rarefaction about the nucleus of many of the larger pyramidal cells, were the main things noticed. A clinical abstract was not requested.

No. 573. *From Dr. Simon Flexner, Rockefeller Institute*.—Sections from the lung of a syphilitic foetus. Showing the spirochaetes; used for control in study of syphilis.

No. 572. *Manhattan State Hospital*.—Pieces of a syphilitic liver, showing gummatous plaques. Used for studies in syphilis, especially by Levaditi's method. No spirochaetes pallidae were found.

Psychiatric Institute — Report of Histological Laboratory

No. 559. *Central Islip State Hospital*.— A slice from the paracentral lobule was received. There was a slight degree of pial thickening, also moderate arterio-capillary sclerosis of the cortical vessels. No evidence of axonal alteration was found in the nerve cells.

The patient was a woman of forty-three, a moderate user of alcohol, who, a few days before admission, acted in a peculiar manner, would not talk, and refused to eat; she became restless and excitable, tearing her clothing and screaming; when admitted one week before death, this state continued. Three days before death a convulsive attack occurred after which she became drowsy, but recovered and was about the ward the next day. The cause of death was supposed to be multiple hemorrhages in the lungs. Used for cortex studies.

No. 588. *Hudson River State Hospital*.— A brain of moderate size, with a slightly turbid pia. The pons appeared slightly and symmetrically swollen but on section was negative. Microscopically the pia and cortex were not remarkable and sections from the midbrain, pons and medulla have shown nothing thus far to explain the difficulty in articulation.

The patient was a man of fifty-nine, who had several transitory depressions since thirty-six; he was committed at forty-six after a suicidal attempt; he said he saw and heard the devil; thought his soul was lost; felt that he was burning up and complained of roaring in his ears. Six years before death his speech became hesitating and tremulous; two years before death there was nausea and dizziness followed by an attack of syncope; a mitral systolic murmur was present. The left vocal cord failed to approximate the median line and the patient pronounced letters imperfectly, deglutition was satisfactory. Facial co-ordination was defective. Otherwise the patient was physically negative. Articulation toward the last consisted of guttural sounds in place of words. Death from pneumonia. Used for tissue studies.

No. 609. *Willard State Hospital*.— The brain weighed 1,385 grammes; the pia was clear over the convexity, slightly hazy over the base. The cortex was rather tender but no softenings were present. The basal and main cerebral vessels were rather diffusely

Psychiatric Institute — Report of Histological Laboratory

thickened and yellowish. The pia of the spinal cord was moderately hazy and thickened; a doubtful atrophy of the posterior roots on the right side in the upper thoracic segments (Th3, 4 and 5) was observed. The right lateral pyramidal tract was greyish looking. The pia contained a few lymphoid cells, but no undoubted plasma cells; the cortical vessels were free. The medullary vessels of the cord in the area of the right pyramidal tract contained a large number of gutter cells in their sheaths and the adjacent nervous tissue was rather cloudy. Abstract not available.

No. 591. *Auburn Prison*.—A normal brain; used for comparison.

IV. NOTES ON THE TECHNICAL WORK OF THE LABORATORY

Within the year about twelve thousand slides have been prepared and mounted by the Laboratory staff, including about five thousand large celloidin sections, and one thousand large paraffin sections. During the summer months the work was much retarded by the epidemic of diphtheria which occurred on Ward's Island; as a result of this two of the very efficient laboratory helpers, who contracted the disease, were incapacitated for most of the summer. The force was further crippled at the end of the year by the resignation of the section cutter, who left to enter Columbia College, preparatory to taking up the study of medicine; his work was of a high order.

V. HOSPITAL REPORTS AND INTER-HOSPITAL MEETINGS

Much work has been done by the Histological Department along the lines followed in preceding years, in making reports to the hospitals on individual cases sent by them for examination, and in preparing reports for the inter-hospital meetings, based largely on groups of cases contributed to the Institute by the particular hospital at which the meeting occurs; these groups were enlarged by other appropriate cases in the Institute collection.

SUMMARIES OF REPORTS OF STATE HOSPITALS

On the following pages appear summaries of the annual reports to the State Commission in Lunacy of the board of managers and superintendent of each of the State hospitals for the insane. Printed copies of the complete reports can be obtained by addressing the respective institutions.

SUMMARY OF THE SIXTY-EIGHTH ANNUAL REPORT OF THE UTICA STATE HOSPITAL

The number of patients in residence on September 30, 1910, was 689 men and 743 women, a total of 1,432, an increase over the preceding year of 44. The average daily population was 1,403, as compared with a rated capacity of 1,443. Nine voluntary cases were admitted during the year, eight of whom have since been discharged, four as recovered, two as improved, one as unimproved, and one as not insane.

More than two-thirds of those admitted on original commitments came from their homes. Of the remainder nearly 43 per cent had been confined in jails, lock-ups and police stations, and a little more than 28 per cent came from general hospitals.

During the year there were two cases of diphtheria, one of scarlatina, one of measles and one case of typhoid fever under treatment in the hospital. The typhoid case was a patient who was suffering with the disease when admitted.

All patients admitted to the institution pass through the reception hospital, where the relatively large number of physicians permit a prompt and thorough examination of each case, whereby those patients who are likely to derive but little benefit from prolonged residence in this building are transferred to wards elsewhere. Patients whose mental disease is chronic in character remain here in observation only until an adequate history can be secured. Patients suffering from insanity of acute forms remain in the reception hospital as long as their stay is likely to be beneficial. The prolonged baths have been used in the treatment of 17 per cent of the new admissions of the year. Acute patients

Summaries of Reports of State Hospitals — Willard

are completely separated from contact with that part of the population of the hospital which through long residence may be said to have become institutionalized. Patients suffering from mental diseases of a chronic type exhibit mannerisms which are readily acquired by acute patients and which, by suggestion, produce habits which are detrimental.

Autopsies were held in forty-eight cases, representing 43.6 per cent of the total deaths, a marked increase over the ratio of the preceding year.

At the opening of the year the junior class of the training school for nurses numbered thirty-six, twenty-five of whom passed the final examinations. The senior class of this year will contain twenty-four members. The senior class of 1910 comprised six women and three men, eight of whom graduated.

Weekly dances throughout the winter and weekly band concerts during the summer were a source of much pleasure to the patients. Trolley rides, baseball games and numerous professional entertainments completed the amusements offered the patients.

Dr. H. D. L. Spence, junior assistant physician, resigned October 4, 1909. Dr. Thaddeus D. Smith, medical interne, resigned November 3, 1909. Dr. Thomas J. Collinson, junior assistant physician, resigned October 30, 1909. Dr. William Leavitt was appointed junior assistant physician October 25, 1909. Dr. Christopher Fletcher was appointed medical interne January 3, 1910, and was promoted to junior assistant physician February 21, 1910. Dr. Ralph E. Clogher was appointed medical interne July 9, 1910.

The total disbursements for maintenance during the year amounted to \$277,508.85, a weekly per capita cost of \$3.793. The amount expended for extraordinary improvements was \$67,882.68. The receipts from the manufacturing department amounted to \$71,118.53.

SUMMARY OF THE FORTY-SECOND ANNUAL REPORT OF THE WIL-LARD STATE HOSPITAL

The number of patients in the hospital on September 30, 1910, inclusive of 43 at their homes on parole, was 1,159 men and 1,219 women, a total of 2,378, an increase of 1 over the preceding year.

Summaries of Reports of State Hospitals — Willard

The average daily population during the year was 2,373, as compared with a capacity of 2,357. During the year five voluntary patients were admitted to the hospital, two of whom were later regularly committed. During the year fifteen patients discharged from the hospital on parole were referred to the committee on after care.

During February an epidemic of German measles appeared in the hospital, affecting seventy-eight persons, inclusive of patients and employees. During March and April seventy-one cases of influenza occurred in the hospital. Several of the patients advanced in years developed complications which resulted in death. During April and May four employees had scarlet fever. During September a charge nurse became ill with diphtheria. There was a marked diminution in the number of cases of erysipelas, which has been more or less prevalent in the hospital in winter and spring for a number of years. Only six of the patients were ill with this disease in 1910. An epidemic of typhoid fever broke out about July 30, mainly among the men employees of Chapin House. Subsequently a few isolated cases developed among patients and employees in other buildings, the total cases at the end of the year being twenty-six. Two men attendants and one patient died from the disease. The infection was probably brought into the hospital by some one and disseminated by flies and was not due to the water or milk supplies. The number of patients suffering from tuberculosis was smaller than in previous years, which is explained in part by the better facilities which the hospital now affords for the care and treatment of patients in this class.

The usual staff meetings were held throughout the year, averaging about three a week. Autopsies were held in ninety-six cases, representing 57 per cent of the total number of deaths.

The senior class of the training school for nurses consisted of sixteen pupils and the junior class of fifteen pupils.

About 50 per cent of the patients were regularly engaged in some useful occupation; the men largely on the farm, garden and grounds and in the various shops, laundry and dining-rooms, the women in the sewing-rooms, laundry, kitchen and dining-rooms.

Summaries of Reports of State Hospitals — Hudson River

A number of selected women patients attended a school conducted by the librarian in which the program consisted of music, readings, recitations, dancing, dumb-bell and bowling exercises and fancywork. A special effort was made to stimulate patients suffering with dementia praecox to some form of activity. Twenty-four professional entertainments were given during the year and fortnightly concerts were given during the winter and weekly concerts during the summer by the band and orchestra. Weekly dances, baseball games, the field day in September and an exhibition of farm products completed the amusements furnished patients.

Dr. William H. Montgomery was transferred to the Kings Park State Hospital, May 12, and Dr. J. Albert Pritchard was transferred from Kings Park State Hospital to Willard, June 11. Dr. Robert E. Doran, first assistant physician, resigned August 1 to become medical inspector for the State Commission in Lunacy.

During the year there were 145 appointments, 135 resignations, 5 transfers from other hospitals, 7 transfers to other hospitals, 7 removals and 5 deaths among the employees.

The total disbursements for maintenance during the year amounted to \$436,726.75, a weekly per capita cost of \$3.597. The amount expended for extraordinary improvements was \$14,768.52. The estimated value of the farm and garden products during the year was \$44,838.81.

SUMMARY OF THE FORTY-FOURTH ANNUAL REPORT OF THE HUDSON RIVER STATE HOSPITAL

On September 30, 1910, there were in residence in the institution 1,300 men and 1,717 women, a total of 3,017, an increase over the preceding year of 74. The average daily population was 2,956, as compared with a rated capacity of 2,825.

During the year 49 voluntary patients were admitted, 5 of whom were subsequently committed by judicial process.

Staff meetings of the nature of clinics are held twice weekly. During the year 100 autopsies were performed, representing 37 per cent of the deaths. During the summer 85 Wasserman reaction tests were made. Inclusive of urine, blood and sputum ex-



MIDDLETOWN STATE HOSPITAL — NURSES' HOME — FRONT VIEW.

Summaries of Reports of State Hospitals — Middletown

aminations, there were 1,911 laboratory examinations made during the year.

Fifteen pupils were graduated from the training school for nurses in 1910.

During the year 61 per cent of the male patients and 62 per cent of the female patients were engaged in useful occupations.

In the summer dances were held in the afternoon in the open-air pavilion in the grove, in the winter in the amusement hall. The merry-go-round continued to be a source of enjoyment. Boat rides, concerts, entertainments, ball games, sleighrides and card parties completed the list of amusements furnished the patients.

Dr. Milton Platt was promoted to junior physician November 24, 1909. Dr. Harry W. Blodgett and Dr. William B. Spain were appointed clinical assistants June 1, 1910. Dr. Fred L. Kreicker was appointed clinical assistant June 2, 1910. Dr. Isham G. Harris was elected to the superintendency of the Mohansic State Hospital July 31, 1910. Dr. William B. Spain left August 15, 1910. Dr. Paul V. Winslow resigned September 14; Dr. Walter Hovey September 15; Dr. Harry W. Blodgett and Dr. Fred L. Kreicker September 30, 1910.

The total disbursements for maintenance during the year amounted to \$596,761.20, a weekly per capita cost of \$3.87. The amount expended for extraordinary improvements during the year was \$138,555.66.

SUMMARY OF THE FORTIETH ANNUAL REPORT OF THE MIDDLETOWN STATE HOMEOPATHIC HOSPITAL

On September 30, 1910, there were 663 men and 1,225 women in residence in the institution, a total of 1,888, an increase of 125 over the preceding year. The daily average population was 1,819, as compared with a rated capacity of 1,865.

During the year there were admitted 7 emergency and 9 voluntary cases.

An epidemic of scarlet fever developed in the hospital in March, affecting 7 patients, 4 employees and 1 physician. Two of the patients died.

Regular staff meetings were held during the year, usually six times each week. At these meetings all medical and administra-

Summaries of Reports of State Hospitals — Middletown

tive matters of general interest are considered and special attention is given to the recently admitted cases.

During the year 71 autopsies were performed, representing 72.4 per cent of the total deaths.

At the beginning of the year there were 4 men and 10 women in the senior class of the training school for nurses, 10 of whom graduated. Two men and 13 women passed the final examinations of the junior class.

During the year 50 per cent of the men and 33 per cent of the women were engaged in useful occupations, on the farm, in the gardens, on the grounds, in the laundry, in the kitchen and dining-rooms, on the wards and in the shops. A patients' fair and chrysanthemum show was held in November, 1909, and an exhibit was made at the Orange County Fair in 1910, both of which proved to be of great interest to the patients.

Baseball, basket ball, professional and amateur entertainments, trolley rides, athletic contests and picnics completed the entertainments offered the patients.

Dr. Henry B. Dorr was appointed medical interne December 1, 1909, and resigned June 4, 1910. Dr. Frederick P. Schenkelberger was appointed clinical assistant February 7, 1910, and was promoted to medical interne March 1, 1910. Dr. Clara Barus, assistant physician, resigned May 1, 1910.

During the year 72 men and 157 women attendants left the institution, 200 of them of their own will. The superintendent urges an increase in wages to secure a sufficient number of suitable nurses and attendants.

The acute pavilion was completed during the year. This structure is of brick, the main wings two stories in height, the center portion three stories. The building is equipped with special diet kitchens, a small infirmary ward, prolonged baths and provisions for hydrotherapy and electrotherapy. The new nurses' home was completed and occupied in the spring of 1910. This building is three stories in height, of red brick and concrete with slate roof.

The total disbursements for maintenance during the year amounted to \$340,294.63, a weekly per capita cost of \$3.598. The amount expended for extraordinary improvements was \$195,505.90.



MIDDLETOWN STATE HOSPITAL — STAFF HOUSE — FRONT.

SUMMARY OF THE FORTIETH ANNUAL REPORT OF THE BUFFALO STATE HOSPITAL

On September 30, 1910, inclusive of 79 patients home on parole, there were 902 men and 1,112 women in residence in the institution, a total of 2,014, an increase of 59 over the preceding year. The average daily population was 1,933 as contrasted with a rated capacity of 1,848.

During the year 33 voluntary patients were admitted, 4 of whom were later committed.

As a result of the law permitting the hospital to parole patients for six months, there was a marked increase in the number of patients at home on parole. No patient is discharged who has not home, friends or employment to which to go. Through hospital officers and attendants and the committee on prevention and after care, the institution keeps in close touch with all cases discharged and accomplishes great good by securing employment, correcting unfortunate surroundings or unpleasant environment and often by financial aid.

During the year 62 autopsies were performed, representing 43.6 per cent of the deaths.

Five men and 13 women graduated from the training school for nurses in June.

Of the 1,928 patients in the hospital on January 20, 1910, 1,100 were engaged in different therapeutic occupations. Camp life at the Wilson farm was broadened by keeping the cottages open for men patients throughout the winter. During the year 77 men and 74 women were in residence at the colony.

The amusements offered the patients during the year consisted of concerts, base ball, parties and moving pictures.

Dr. Frederick L. Wright, interne, resigned October 29, 1909. Dr. Gideon O. Barclay was appointed special attendant January 3, 1910, and resigned March 10. Dr. John C. Calhoun, junior assistant physician, resigned March 29, 1910. Dr. Henry P. Frost, first assistant physician, resigned July 1, 1910, to accept the superintendency of the Boston State Hospital. Dr. Roy A. Paxton was appointed interne June 9, 1910, Dr. John P. Harrison interne August 1, 1910, and Dr. William B. Newcomb special attendant September 2, 1910.

Summaries of Reports of State Hospitals — Binghamton

The total disbursements for maintenance during the year amounted to \$390,653.16, a weekly per capita cost of \$3.876. The amount expended for extraordinary improvements was \$28,502.82.

SUMMARY OF THE THIRTY-SECOND ANNUAL REPORT OF THE BINGHAMTON STATE HOSPITAL

On September 30, 1910, inclusive of 31 patients at home on parole, there were in residence in the institution 1,391 men and 970 women, a total of 2,361, an increase over the preceding year of 123. The average daily population was 2,303 as compared with a rated capacity of 2,328.

During the year there were under treatment in the hospital a few cases of measles and of mumps, occasional sporadic cases of typhoid fever, from which one employee died, and one fatal case of scarlet fever in a young women employee, probably contracted outside the institution.

Staff meetings were held twice each week, at which all newly admitted patients were presented and discussed. During the year 121 autopsies were performed, representing 85.81 per cent of the deaths. Investigations of tuberculosis and of the cerebrospinal fluid in cases of general paresis were continued throughout the year. The chemical and pharmaceutical laboratory made 739 analyses and tests during the year.

In June, 1910, 2 men and 4 women graduated from the training school for nurses. The school opened in September, 1910, with 10 seniors and 22 juniors enrolled. Special courses of instruction are given to attendants not enrolled in the training school.

During the year, with an average daily population of 2,303, 358,675 days' labor were performed by the patients on the farms, gardens and grounds and in the kitchens, dining-rooms, halls, laundry and shops.

Camp life on the banks of the Susquehanna was enjoyed by the patients as keenly as in years past and resulted in marked mental and physical improvement in a large proportion of the patients enjoying the changes afforded by the open life.

Base ball, band concerts and picnics in the summer and enter-



BUFFALO STATE HOSPITAL — ADMINISTRATION BUILDING.

Summaries of Reports of State Hospitals — St. Lawrence

tainments, moving picture exhibitions and dances in the winter were the principal amusements offered the patients.

On September 30, 1910, Dr. E. H. Wiedrich, junior physician, resigned, and on July 1, 1910, Dr. Raymond G. Wearne was appointed medical interne.

During the year 280 resignations and discharges occurred among the employees, comprising 60 per cent of the entire working force.

The total disbursements for maintenance during the year amounted to \$426,338.36, an average weekly per capita cost of \$3.56. The amount expended for extraordinary improvements was \$77,814.85. The estimated value of the farm and garden products during the year was \$31,121.49.

SUMMARY OF THE TWENTY-FOURTH ANNUAL REPORT OF THE ST. LAWRENCE STATE HOSPITAL

On September 30, 1910, the number of patients in residence, inclusive of those at home on parole, was 901 men and 1,066 women, a total of 1,967, an increase of 80 over the previous year.

The superintendent recommends the establishment of local institutions for the care of senile cases who require only custodial care. They need only to be kept from injury by falls and wandering away, to be kept clean and to be helped at meal time and on arising in the morning and on retiring at night. The superintendent also recommends the establishment of observation wards in connection with general hospitals in the larger cities where patients could be temporarily treated and where no doubt many would improve sufficiently to render judicial commitment to a hospital for the insane unnecessary.

During the year 48 voluntary cases were admitted to the hospital, 13 of whom were soon discharged as not insane. During the year 79 autopsies were performed, representing 58 per cent. of the deaths.

During the year two patients died from typhoid fever, probably due to infection in the water supply. During the winter two cases of diphtheria developed on one of the wards. After cultures had been taken from the throats of the patients, it was found that a large proportion of the population were carrying the germs of

Summaries of Reports of State Hospitals — Rochester

diphtheria. Antitoxin was promptly administered and there is now every reason to believe that the patient population is entirely free from danger from this disease.

In September, seven pupils graduated from the training school for nurses. During the year the course of instruction given to probationers was extended to embrace a series of thirteen lectures and demonstrations and thirteen hours of practical work on the wards.

Dances, baseball, picnics, boating parties and moving picture entertainments constituted the amusements offered the patients during the year.

The success of the classes for the re-education of demented patients justified the inclusion during the year of a still larger number of cases. During the year a singing teacher was employed with gratifying results. Attention is also given to the prevention of deterioration in interests and habits in patients of the dementia praecox group.

During the year Dr. James M. O'Neil resigned as assistant physician. Dr. Henry L. Trenkle, appointed as medical interne in April, 1910, resigned August 13. Dr. Cyrus W. Culver was appointed medical interne August 2 and Dr. Clarence H. Bellinger August 15. On January 8, 1910, occurred the death of General Newton Martin Curtis, a member of the board of managers.

The total disbursements for maintenance during the year amounted to \$379,992.85, a weekly per capita cost of \$3.777. The disbursements for extraordinary improvements during the year amounted to \$42,692.88. The estimated value of the products of the farm, garden and dairy during the year was \$41,592.46.

SUMMARY OF THE TWENTIETH ANNUAL REPORT OF THE ROCHESTER STATE HOSPITAL

The number of patients in residence at the hospital on September 30, 1910, inclusive of those at home on parole, was 577 men and 953 women, a total of 1,430, an increase of 50 over the preceding year. The average daily population during the year was 1,401 patients as contrasted with a rated capacity of 1,305. The admissions during the year numbered 367 cases, an increase of 16 per cent over 1909.

Summaries of Reports of State Hospitals — Gowanda

Throughout the year an average of 5 per cent of the total population of the hospital were at home on parole of six months pending discharge. The privilege of a long parole has a tendency to shorten the length of the patient's stay at the hospital since it gives the friends courage to ask for an earlier parole, knowing that if the trial at home proves a failure the patient can be returned to the care of the hospital without cumbersome and delaying formalities. Furthermore, possibilities of a long parole give patients who have an insight into their condition a feeling of confidence and courage to leave the hospital sooner than they otherwise would. Parole of the grounds of the hospital has been granted wherever possible.

During the year 58 autopsies were performed representing 45 per cent of the deaths.

The patients in the school conducted for the benefit of dementia praecox cases showed marked improvement. The scope of the work of the "lake farm" has been extended by frequent excursions of patients who were in condition for the trip in addition to the selected class of patients who were in residence in the camp throughout the entire summer.

During the year 12 graduates of the training school for nurses received diplomas from the Education Department.

The total disbursements for maintenance during the year amounted to \$290,912.55, a weekly per capita of \$3.993.

SUMMARY OF THE SEVENTEENTH ANNUAL REPORT OF THE GOWANDA STATE HOMEOPATHIC HOSPITAL

The number of patients in residence in the hospital on September 30, 1910, inclusive of 3 at home on parole, was 559 men and 520 women, a total of 1,079, an increase of 73 over the preceding year. The average daily population was 1,073 as compared with a rated capacity of 972.

At all times when possible the hospital sends a physician to examine committed patients who were over 65 years of age to exclude pure cases of senility.

On February 20th there developed a case of scarlet fever which was the beginning of an epidemic affecting 31 patients and 37 employees. The cause of the affection is uncertain, although per-

Summaries of Reports of State Hospitals—Gowanda

haps originating in the fault of the night watchman whose daughter had suffered from a mild attack of the fever. Twenty cases of the disease developed within five days, embracing nearly as many wards. Undoubtedly the congregate dining system at the hospital was the cause of the rapid and continued infection throughout the institution. The building which had been fitted up for graduate nurses of the training school and later the tuberculosis pavilion were temporarily converted into hospitals. Quarantine was established over the hospital and on May 24th the last case developed. One case developed peritonitis and died. Only three were of a malignant form, two of whom because of their general physical debility were unable to resist the ravages of the disease.

During the year 59 autopsies were performed, representing 82 per cent of the total deaths.

The graduating class from the Nurses' Training School in 1910 numbered 7. The school opened in October, 1910, with eighteen pupils in the senior class and twenty-two in the junior. The superintendent deplors his inability to secure a competent superintendent of nurses.

On October 1, 1910, 47 per cent of the patients in the hospital were engaged in useful occupations, inclusive of farm, dairy, laundry, power-house, kitchen, bakery, dining-room and shops.

Disturbed, filthy and destructive patients are taken early in the morning to the grove on the hospital grounds where they are kept during the entire day. A pavilion now under construction in this grove will enable the institution to keep patients away from the wards regardless of weather, both winter and summer. This open air treatment has proved to be of great benefit to the patients, who have become more cleanly in habits, less destructive and less filthy.

Tea parties for the women, fancy work, sewing and weekly dances during the winter, and weekly moving picture shows, lawn concerts, baseball and croquet during the summer months, constitute the amusements.

On September 1, 1910, Dr. Frederick C. Robins, assistant physician, resigned to go into private practice. On October 1, 1910,



GOWANDA STATE HOSPITAL — ADMINISTRATION BUILDING AND WINGS.

Summaries of Reports of State Hospitals—Kings Park

Dr. Carl Von A. Schneider was promoted from assistant physician to second assistant physician. On October 1, 1909, Dr. Judson F. Browne was promoted from medical interne to junior physician. On March 1, 1910, Dr. Earl V. Gray was promoted from medical interne to junior physician.

The total disbursements for maintenance during the year amounted to \$192,543.44, a weekly per capita cost of \$3.442. The amount expended for extraordinary improvements was \$49,415.03. The estimated value of the products of the farm, garden and poultry yards was \$27,192.36.

SUMMARY OF THE FIFTEENTH ANNUAL REPORT OF KINGS PARK STATE HOSPITAL

The number of patients in the hospital on September 30, 1910, inclusive of 19 at home on parole, was 1,306 men and 1,985 women, a total of 3,291, an increase of 183 over the preceding year. The average daily population was 3,227, as compared with a rated capacity of 2,884.

Six voluntary patients were admitted during the year. The overcrowding was more marked during 1910 than ever before.

During the year there were 9 cases of erysipelas, 6 cases of typhoid fever, 11 cases of measles and 1 case of diphtheria.

Staff meetings were held as usual, at which laboratory material was presented and special papers read. Use of the Wasserman test as modified by Dr. Noguchi has been an almost routine procedure in all of the cases in which tests would seem to be indicated. Staff conferences were held three times a week at which all cases were presented on admission, on completion of summary and prior to discharge. In this work because of the increasing rate of new admissions, the staff has fallen somewhat behind. Arrangements have been made to hold two staff meetings each week on both the male and female service. The practice of preparing summaries of all cases has been introduced. During the year autopsies were performed in 79 cases, representing 29 per cent. of the total deaths. Women nurses are employed on certain of the men's wards with complete satisfaction.

In 1910 there were 14 graduates in the training school for nurses.

Summaries of Reports of State Hospitals—Kings Park

Weekly dances, baseball games and occasional entertainments by professionals constituted the amusement afforded the patients.

During the year occurred the death of Honorable John Rooney, who had been a member of the Board of Managers for many years.

During the year the following changes occurred in the medical staff:

RESIGNATIONS.

Dr. George O'Hanlon, first assistant physician, April 1, 1910.

Dr. A. J. Capron, second assistant physician, May 15, 1910.

Dr. W. H. Sanford, assistant physician, June 30, 1910.

Dr. Edward P. Powers, assistant physician, July 1, 1910.

Dr. Stephen E. Vosburgh, medical interne, June 1, 1910.

Dr. Lee W. Thomas, medical interne, March 31, 1910.

Dr. Jennie A. Dean, medical interne, September 30, 1910.

TRANSFERS.

Dr. J. Albert Pritchard, assistant physician, to Willard State Hospital, June 1, 1910.

Dr. J. C. Partridge, medical interne, to Binghamton State Hospital, September 30, 1910.

APPOINTMENTS.

Dr. C. Floyd Haviland, first assistant physician, April 26, 1910.

Dr. William H. Montgomery, second assistant physician, May 16, 1910.

Dr. John R. Ross, junior assistant physician, April 3, 1910.

Dr. Harry I. Partridge, medical interne, March 28, 1910.

Dr. Norman P. Bentley, medical interne, May 16, 1910.

Dr. Jennie A. Dean, medical interne, June 20, 1910.

Dr. J. C. Partridge, medical interne, July 20, 1910.

Dr. James P. Kelleher, medical interne, August 9, 1910.

PROMOTIONS.

Dr. Sherman Brown, assistant physician, April 1, 1910.

Dr. P. L. Dodge, assistant physician July 1, 1910.

Dr. S. R. Leahy, assistant physician, July 1, 1910.

Dr. Nell G. Bartram, junior physician, April 1, 1910.

Dr. H. I. Partridge, junior physician, July 14, 1910.

Summaries of Reports of State Hospitals—Long Island

The institution experiences difficulty in securing employees because of the competition of the metropolitan district which offers higher wages for work of the same grade.

The total disbursements for maintenance during the year amounted to \$583,021, a weekly per capita cost of \$3.689. The amount expended for extraordinary improvements was \$256,969.13. The estimated value of the farm, garden and poultry products was \$15,192.20. The Board of Managers recommends the employment of a graduate of an agricultural college to act as manager of the farm and garden.

SUMMARY OF THE FIFTEENTH ANNUAL REPORT OF THE LONG ISLAND STATE HOSPITAL

On September 30, 1910, the number of patients in residence at the hospital, inclusive of those at home on parole, was 313 men and 440 women, a total of 753 as compared with 778 the previous year. The average daily population was 751 as contrasted with a rated capacity of 655.

Of the 336 admissions during the year, 239 were received from the psychopathic ward of the King's County Hospital. Twenty-seven cases were admitted under the emergency provision of the insanity law and 19 were admitted as voluntary patients. The patients received at this hospital are selected cases, many of whom could not stand the transfer to more distant hospitals. During the year 80 per cent. of the cases admitted from the King's County Hospital were brought in on a stretcher.

Sixty-seven of the 219 discharges during the year were at first released on parole.

During the year there were two outbreaks of infectious diseases in the hospital. Two of the women nurses contracted scarlet fever and one nurse and two women patients came down with diphtheria. One of the patients died of diphtheria, the other made a good recovery.

During the year 30 autopsies were performed out of a total of 142 deaths.

Twenty-eight pupils were enrolled in the training school for nurses. In May a class of 10 was graduated, 5 of whom took the examination for registered nurse, in which 4 were successful.

Summaries of Reports of State Hospitals—Manhattan

Therapeutic occupation as a curative measure has been further elaborated over the system in force last year.

Three educational classes were organized during the past summer with a membership on October 1 of 59. Many patients who had appeared disturbed or otherwise inaccessible to ordinary interests, by patient efforts have been interested in various employments with much resulting benefit to the patients and great relief to the care of such patients on the ward.

Dances were held weekly during the winter and occasional card parties attended by both male and female patients were held in the amusement hall.

In a nursing force of 95 the number of changes during the year was 172. During a single month in the summer 28 nurses left the hospital. The superintendent argues that better wages, better quarters, better hours, better nurse supervision and better training are needed to overcome present difficulties.

The total disbursements for maintenance during the year amounted to \$178,841.92, a weekly per capita cost of \$4.5796. The amount expended for extraordinary improvements was \$11,368.95. The estimated value of the farm and garden products raised during the year was \$2,502.28.

SUMMARY OF THE SIXTH ANNUAL REPORT OF THE MANHATTAN STATE HOSPITAL

On September 30, 1910, there were in residence in the hospital 1,897 male and 2,688 female patients, a total of 4,585, an increase of 70 over the preceding year. The average daily population was 4,580, as contrasted with a rated capacity of 3,600.

Of the 1,278 admissions during the year, exclusive of transfers, 1,173 were admitted through the psychopathic ward of Bellevue Hospital. During the year eight men and sixteen women were admitted as voluntary patients. The superintendent deems it advisable that wards be set apart for the reception and care of these mild cases.

Before final discharge, patients are paroled, usually for a period of six months, during which time the patients report to the ward physician that the progress of the case can be noted. The superintendent believes that in a majority of cases the period of parole might better be three months.

Summaries of Reports of State Hospitals—Manhattan

During June an employee of the Psychiatric Institute who lives in New York City but who had taken her lunch in the clerks' dining-room became ill and a culture proved to be positive for diphtheria. Soon afterwards a cook employed in the staff house showed symptoms of the disease and within a few days died. From this time the disease spread with astonishing rapidity, with the clerks' dining-room apparently the primary focus. On July 6 there were 59 positive cases. Meanwhile every patient, employee and officer in the institution had received an immunizing dose of antitoxin, and the number of new cases soon subsided. The general visiting of patients was suspended for two weeks and a rigid quarantine maintained. The total number of positive cases during the epidemic was 64, of whom 33 were employees and 31 patients. In most cases the disease ran a mild course with no complicating sequelae. In addition to the treatment by antitoxin, local applications of antiseptic sprays, gargles and washes were used and tonic systemic medication as indicated in individual cases. By the latter part of August it was felt that the danger was past.

During the year a few cases of idiopathic erysipelas developed among the patients and three cases of typhoid fever among employees. In only one of these cases was there any reason to suspect that the disease might have been contracted within the institution. For several years the hospital has used boiled water for all drinking purposes, and although it is impossible to enforce this rule absolutely, it has been a factor in the prevention of this disease.

In addition to the usual daily staff meetings held during the morning hours, the Ward's Island Psychiatric Society held monthly meetings except during the summer at which original papers were read and clinical cases presented by various members of the hospital staff and of the Psychiatric Institute.

During the year the usual course of isolation and treatment in the open air has been carried out for the tubercular cases.

At the opening of the year the junior class of the training school for nurses numbered 3 men and 14 women and the senior class 1 man and 9 women. In June the class of 10 was graduated. At

Summaries of Reports of State Hospitals—Manhattan

the close of the year the institution retained in its service 24 men and 95 women graduates.

During the year an average of 72 per cent of the patients were employed in some useful work, the women in the sewing room, the linen room, kitchens, dining-rooms, laundry, nurses' home, staff quarters and garden, the men outdoors in the vegetable and flower gardens, on the roads, on the lawns, in the stables, laundry and shops. Many disturbed patients of both sexes were employed in picking hair and tearing rags. The classes introduced the preceding year in brass, embroidery, raffia, etc., were extended.

The amusements given the patients consisted of dances, parties, entertainments, excursions and sports. During the year a specially trained instructor was assigned to the work of establishing occupations and diversions adapted to the wards.

The following changes in medical staff occurred during the year:

David C. Cooper, appointed medical interne October 1st; resigned January 1st.

Francis J. Lennon, appointed medical interne October 10th; resigned July 17th.

Frederic J. Farnell, appointed junior physician October 19th; promoted to assistant physician August 1st.

Arthur E. Soper, medical interne, resigned October 31st.

Edward Miltimore, promoted to assistant physician December 1st; resigned August 1st.

William F. Lorenz, assistant physician, resigned March 26th.

Clarence F. Haviland, second assistant physician, resigned April 25th.

Ralph P. Folsom, promoted to assistant physician June 1st.

Edward J. Strickler, medical interne, resigned June 1st.

Gustav F. Boehme, Jr., appointed clinical assistant June 11th.

Gerhard L. Moench, appointed clinical assistant July 5th; promoted to medical interne August 1st.

Cornelius J. Buckley, appointed medical interne July 7th; resigned August 3d.

James J. Shea, junior physician, resigned August 1st.

William C. Garvin, promoted to second assistant physician August 5th.

Summaries of Reports of State Hospitals — Central Islip

Harold W. Wright was transferred as junior physician from Hospital for Crippled and Deformed Children, West Haverstraw, N. Y., March 1st, and was promoted to assistant physician September 18th.

Ernest N. Poat was transferred as junior physician from Rome Custodial Asylum, Rome, N. Y., April 17th.

Dr. Louis C. Pettit, appointed to the medical staff of the New York City Asylum for Men in 1889, and continuing in the service of the institution on its transfer to the State, died on June 2d.

During the year there were 529 appointments, 430 resignations, 62 dismissals and 4 deaths among the employees; 32 were dropped from the rolls and 6 were transferred to other hospitals.

The total disbursements for maintenance during the year amounted to \$835,598.33, a weekly per capita of \$3.4989. The amount expended for extraordinary improvements was \$105,145.87. The estimated value of farm and garden products was \$19,034.47, and the estimated value of articles made by patients \$61,072.43.

**SUMMARY OF THE ANNUAL REPORT OF THE CENTRAL ISLIP
STATE HOSPITAL**

On September 30, 1910, the number of patients in residence was 2,578 men and 1,655 women, a total of 4,233, an increase of 208 over the preceding year. The average daily population was 4,164, as compared with a rated capacity of 3,996. During the year more than 300 cases were deported through the activity of the Board of Alienists.

Many patients were discharged from parole with satisfactory results. The After-Care Committee of the State Charities Aid Association has continued to co-operate freely with the hospital, securing positions for quite a number of friendless patients upon their discharge.

Aside from a few sporadic cases of typhoid fever, the health of the patients was excellent.

The superintendent is strongly of the opinion that general paralysis is far more frequent in women than has hitherto been believed, and insists upon a careful investigation of the memory for general paralysis defects which are fairly characteristic. To

Summaries of Reports of State Hospitals—Central Islip

avoid, in making diagnoses of newly admitted cases, the ignoring of physical signs, special attention is given to the physical condition of the patients. The Wasserman reaction is used very widely. .

Four regular staff meetings are held each week, two for men and two for women. At these meetings summaries of the case records of all patients admitted are read and filed under a cross index, according to diagnosis. Meetings of the staff are also held periodically at the pathological laboratory for the discussion of post mortem material. One hundred and fifty-three autopsies were performed during the year, representing 37 per cent of the total deaths, a marked increase over previous years.

The number of Sunday visitors, who are granted a reduced rate of \$1.20 for the round trip from Brooklyn by the Long Island Railroad, frequently is as high as 400.

In view of the difficulty of securing attendants with proper qualifications, especially in the metropolitan district, the board of managers reiterates their demand for an increased wage schedule for ward workers.

The nurses' training school opened with twenty-two students in the junior class and twelve in the senior class. After examination all of the seniors were graduated.

All employment is under the direction of the physician, who assigns patients to various occupations and maintains a careful supervision of this work. When a patient does not appear to take interest in his work, he is changed to a new line of employment. Male patients are employed in the storehouse, laundry, bakery, kitchen, dining-rooms, shops, on the ground and farm, and also on road work. Female patients are employed in the laundry, in the sewing-room and housekeeping on the wards.

Field day sports were held on Memorial Day, the Fourth of July and Labor Day. During the summer baseball games were played every Saturday and the semi-military review of patients and attendants was developed and held each Sunday afternoon. Out-door evening concerts by the band were given during the summer, and weekly dances and orchestra concerts during the winter. Moving picture shows and professional vaudeville entertainments completed the amusements.

Summaries of Reports of State Hospitals—Mohansic

During the year Dr. John J. Harrington, Dr. Arthur G. Lane, Dr. Lee W. Thomas and Dr. Francis J. Lennon were appointed junior assistant physicians and Dr. Howard F. Child and Dr. Clive A. Moore were appointed medical internes. Dr. Ralph G. Reed was promoted from medical interne to junior assistant physician, Dr. Sarah L. Smalley from medical interne to woman physician, Dr. Albert E. Ullman from junior assistant physician to assistant physician and Dr. Edward H. Ende from medical interne to junior assistant physician. Marcus A. Curry, medical interne, Elwin C. Taylor, junior assistant physician, and Lee W. Thomas, junior assistant physician, resigned.

The total disbursements for maintenance during the year amounted to \$710,134.13, a weekly per capita cost of \$3.2704. The amount expended for extraordinary improvements was \$295,589.70. The estimated value of the products of the farm, garden, orchard, poultry yards and dairy during the year was \$15,667.13.

SUMMARY OF THE FIRST ANNUAL REPORT OF THE MOHANSIC STATE HOSPITAL

On September 30, 1910, there were twelve male patients in residence in this institution, all admitted on transfer from other hospitals. All of these patients were engaged in working the farms comprising the site for the new hospital.

EIGHTEENTH ANNUAL REPORT OF THE STATE CHARITIES AID ASSOCIATION TO THE STATE COM- MISSION IN LUNACY

NEW YORK, November 1, 1910.

To the State Commission in Lunacy:

In accordance with chapter 635 of the Laws of 1893, and amendatory acts, the State Charities Aid Association herewith respectfully submits to your Honorable Commission its eighteenth annual report. The report contains, as usual, much matter which is not new to those to whom it is addressed, but which it seems to us desirable to include for the benefit of the large number of persons to whom it is sent who are not equally familiar with these subjects.

The total number of insane persons in State hospitals and licensed private asylums on October 1, 1910, was 32,657, an increase of 1,116 over the previous year. Of this total number 30,445 patients were in the fourteen State hospitals (not including Matteawan and Dannemora), being 1,083 more than on October 1, 1909. This figure is about one hundred more than the average annual increase for the past five years, which is 985.

The association's legally appointed visitors to State hospitals now number forty. They have continued to do admirable work during the past year and have presented interesting annual reports, which appear on pages 290 to 299 of this publication. We do not necessarily indorse every recommendation made by our visitors, but we believe that the Commission and the public should know how these institutions impress representative men and women in their localities.

RECENT LEGISLATION

APPROPRIATIONS

The appropriations for the maintenance of the insane have been identical for the past three years, notwithstanding an annual in-

State Charities Aid Association — Annual Report

crease of about one thousand in the number of patients to be maintained. There has been a considerable deficiency as a result of inadequate appropriations but the Legislature of 1910 made a deficiency appropriation which has practically wiped this out. The appropriation for buildings and repairs was, however, less last year than since 1907, and is insufficient to provide accommodations for the annual increase of patients for which each Legislature is called upon to provide and of course can make no impression on the accumulated unrelieved overcrowding due to inadequate appropriations in the past.

Chapter 529 of the Laws of 1910 authorized the State Commission in Lunacy to contract for the erection and completion of the Mohansic State Hospital at a total cost of not exceeding \$2,000,000 for 2,000 patients, the work to be done under the direction of the State Commission in Lunacy and the board of managers of the hospital. Only \$100,000, however, was appropriated for immediate use.

COMMITMENT OF THE ALLEGED INSANE FOR EXAMINATION

During an investigation made by the State Charities Aid Association into the need for better provision for the transportation of persons suspected of being insane, it was found that many alleged insane persons were remanded to jail by magistrates in New York City, who should have been sent to the psychopathic wards of Bellevue or Kings County Hospital for examination and determination of their mental condition. Such persons would have been sent to hospitals instead of being remanded to jails if the magistrates had felt that they had unquestioned legislative authority for so doing. In order to give them this authority, the association drafted a bill in co-operation with the State Commission in Lunacy, which amended an old section of the Insanity Law that had become more or less obsolete. This bill became law as chapter 557 of the Laws of 1910. It has already resulted in a diminution of the number of insane persons found in police stations, district prisons and jails.

HEALTH OFFICERS

Chapter 608 of the Laws of 1910 amended the Insanity Law to confer upon the health officers duties connected with the temporary

State Charities Aid Association — Annual Report

care of the alleged insane and their commitment which were formerly vested in the poor law officials. The law requires that the poor law authorities, except in the city of New York and county of Albany, which are exempted, shall notify the health officers of any poor insane, or apparently insane person known to be in need of the relief provided by the Insanity Law, and the health officers when so notified or otherwise informed must see that proceedings are taken for the determination of the mental condition of such persons and for their commitment to a hospital if their condition warrants it. The health officer is required to provide for the proper care, treatment and nursing of the alleged insane pending the determination of their mental condition, and see that they are without unnecessary delay transferred to proper institutions for their care and treatment.

This law went into effect October 1, 1910, and it is expected that great improvement in the methods of caring for the alleged insane will result from this change. The State Commission in Lunacy and the State Charities Aid Association have for several years advocated the adoption of such a plan on the ground that the mentally ill should from the outset have the benefit of medical care, and be treated primarily as sick people rather than as primarily poor or even unruly persons. It is to be hoped that the State hospitals will endeavor to establish close and helpful relations with health officers in their respective districts and give them such instruction and advice regarding the temporary care of the insane pending commitment to State hospitals as will qualify these officials for providing proper care for the cases that come into their jurisdiction and for helping to bring about a more rational attitude on the part of the general public toward those afflicted with mental disease. The dissociation of the poor law officials from such cases will, it is hoped, remove the last stigma of pauperism. It is to be assumed that physicians will not countenance the detention of disturbed mental cases in jails, station-houses and lockups, and that the very considerable number of patients, last year 18 per cent. of those committed, reaching State hospitals from these sources, will be immediately reduced, and the still more unfortunate stigma of association with criminals will be forever done away with.

State Charities Aid Association — Annual Report**EXAMINATION OF FOOD SUPPLIES AND AGRICULTURAL METHODS**

The Agricultural Law was amended by chapter 434 of the Laws of 1910 to authorize the Commissioner of Agriculture to have examinations made of food or food products produced or purchased for use in the State institutions and also of agricultural methods of these institutions, reporting the results of his examinations and making recommendations to the State Commission in Lunacy in connection with the State hospitals visited.

This law aims at securing the much needed examination of the food supplies of the State institutions, but it seems doubtful whether with the facilities at the command of the Commissioner of Agriculture sufficiently complete and frequent analyses and examinations can be made to meet the needs of the present situation. It is, however, a step in the right direction and may afford an opportunity for collecting some data as to the need for a well-established system to safeguard the qualities of the supplies raised and purchased. The experts in the Department of Agriculture could doubtless be of great service to the State institutions if they could afford the time from their other duties to examine into the agricultural methods of these institutions and advise with regard to needed changes and improvements.

QUALIFICATIONS OF BOARD OF ALIENISTS

Chapter 604 of the Laws of 1910 amended the Insanity Law to broaden somewhat the qualifications required for examiners of the Board of Alienists, the three members of which are empowered to examine immigrants entering the Port of New York and the alien and non-resident insane in State hospitals and other public institutions for the purpose of determining whether they are suitable cases for deportation or removal. The law formerly provided that each examiner should be "a reputable physician, a graduate of an incorporated medical college, of at least ten years actual experience in the practice of his profession, and of at least five years' experience in the care of the committed insane in the New York State hospitals." These requirements were considerably more stringent than those for the position of superintendent of a hospital. The law requires that a superintendent shall be "a well-educated phy-

State Charities Aid Association — Annual Report

sician and a graduate of an incorporated medical college, of at least five years actual experience in an institution for the care and treatment of the insane." It does not require that superintendents or subordinate officers and employees should have had their experience necessarily in New York State institutions, and to limit the choice for such positions in this way is an unfortunate policy. The law was therefore amended by the addition of the words "or elsewhere" after the provision requiring experience in New York State hospitals, thus opening the positions to physicians from other States. The law was further amended by the addition of the words "or alleged" to the requirement that an examiner should have had five years' experience in the care and treatment of the committed insane, with a view to opening these positions to physicians who had gained experience in detecting insanity by working with the alleged insane, a form of experience particularly valuable in connection with the work of this Board.

THE LICENSING OF PRIVATE INSTITUTIONS

Chapter 329 of the Laws of 1910 supplemented the law providing for the licensing by the State Commission in Lunacy of any private institution for the care and treatment of the insane by providing that private institutions for persons suffering from diseases other than mental should not receive insane patients without a license from the Commission. Public hospitals making provision in pavilions or special wards for the care or temporary detention of the alleged insane or patients pending commitment to institutions for the insane are exempted from this requirement.

NEW ACCOMMODATIONS NEEDED

According to the State Commission in Lunacy, the total excess of the census of the State hospitals over their certified capacity at the close of the fiscal year 1910 was 2,549. Appropriations already made will provide accommodations for about half of this number but make no provision for the remainder or for the increase of the insane to be expected during the year 1911, and which should be provided for in advance instead of being allowed to accumulate in already overcrowded buildings. As the capacity

State Charities Aid Association — Annual Report

of the State hospitals is estimated at a somewhat high figure and in the case of certain institutions seems to have been considerably overstated, the degree of overcrowding which now exists represents a condition of great discomfort for the patients; a condition which is constantly growing worse, which seriously interferes with their proper care and treatment, and for which there is no adequate relief in sight. With an annual increase of about 1,000 in the number of patients each year, there will be by October 1, 1911 fully 2,000 patients in the State hospitals in excess of their capacity. The Mohansic State Hospital in Westchester county, established by law but not yet built, is planned to accommodate this number and construction work should be pressed with the greatest expedition. In fact, it might be well to consider building at the outset for 3,000 instead of 2,000 patients.

Much more should be done in the near future to meet the needs of the insane of the southeastern part of the State. The interests of this section have too long been subordinated to those of other parts of the State. The State hospitals outside of New York City and Long Island have been enlarged until they more than meet the needs of their respective districts. Thousands of patients have been transferred to them from the metropolitan district because of the entire inadequacy of the existing provision for such cases in the district where they belong. At the present time any considerable further enlargement of the up-state hospitals means a transfer to them of still more patients from New York City, which is an injustice to the patients and to their friends and causes an unnecessary expense for transportation. Of the 15,858 patients belonging in New York City and Long Island, 11,887 are provided for at the State hospitals receiving patients directly from the metropolitan district, while 3,971 are distributed in other hospitals, the nearest of which are at Middletown and Poughkeepsie, the most distant at Gowanda and Ogdensburg. This policy should not be continued. The insane should be provided for in the part of the State where they belong and where they can remain reasonably near their home and friends. The insane of New York City, instead of being scattered to so large an extent over the State, should have hospitals built for them in the southeastern part of the State.

State Charities Aid Association — Annual Report

Of the four State hospitals now receiving patients directly from New York City, three are already so large that any extensive further additions are undesirable. When buildings now under construction are completed, their certified capacity will be as follows: Kings Park, 3,434; Manhattan, 3,800; Central Islip, 4,700, a total of 11,934. Their census October 1, 1910, was already in excess of this figure, being 12,114.

The remaining hospital in this section, the Long Island State Hospital at Flatbush, is a small institution caring for only about 750 patients at the present time and incapable of very great expansion on its present site. This hospital, however, might well be increased to accommodate 1,000 patients and have its present plant supplemented by a farm colony for another 1,000 located farther down on Long Island. The desirability of having a moderate sized hospital on this location is very great. The situation is a desirable one, adjacent to the Kings County Hospital from whose psychopathic ward most of the patients are received, and within easy reach of a large and rapidly growing population. The boroughs of Brooklyn and Queens from which the hospital receives its patients need an institution within their limits for the immediate reception of insane patients who are not in proper physical condition for a railway journey. Fully a quarter of the Brooklyn cases are so acutely ill or so feeble or prostrated, that their removal to any distance is extremely undesirable, and last year nearly 80 per cent. of the patients received from Kings County Hospital were brought in on a stretcher. The Long Island State Hospital at the present time can receive about one-quarter of the cases committed from Brooklyn, and preference can be given to those whose condition does not justify their transfer to a greater distance. The buildings now constituting the Long Island State Hospital, while obsolete in construction and arrangement, and greatly dilapidated through lack of being kept in proper repair, are substantial and well-built, and capable of adequate modification to fit them for use as a modern hospital. It would be greatly to the advantage of the citizens of Brooklyn to have such a hospital within their limits and this institution should be planned to meet the needs of the growing population of this section by becoming a reception center where patients could be received for temporary

State Charities Aid Association — Annual Report

care, the acutely insane given curative treatment, and cases that would benefit by being near their friends kept where they can be readily visited. If a dispensary and out-patient department could be established at this hospital, it might become an important element in the treatment of incipient cases and in the prevention of insanity in the district which it serves.

To connect with the Long Island State Hospital a farm colony for the more able-bodied and quiet class of patients would be an advantageous and economical arrangement. The Kings Park and Central Islip State Hospitals both began as colonies of the Long Island and Manhattan State Hospitals, and until they grew to a sufficient size to justify their separate existence, were successfully maintained on the colony plan. This plan saves the salary of a superintendent and other expenses of administration and is widely approved by those familiar with the organization of such institutions. Chapter 77 of the Laws of 1909 authorizes the sale or exchange of the property belonging to the State at Creedmoor for lands to be used as a site for the Long Island State Hospital. While this law authorizes the removal of the present institution to the lands so acquired, it could readily be changed to authorize the retention of the existing hospital on its present site and the development of the new lands as a colony. Though the efforts as yet made to secure a suitable site have been unsuccessful, comparatively few sites have been considered, and another attempt should be made to secure for the benefit of the people of this section the proceeds of the available property of the State at Creedmoor. The establishment of such a colony is probably the only way which is both wise and economical of providing for the annual increase of the insane for another year or two. With the increases of the fiscal years 1910 and 1911 accommodated at Mohansic, the increase of the year 1912 and perhaps of the year 1913 also might be accommodated in this way on Long Island. Even this provision, however, will not do away with the necessity of considering within a year or two the building of still another new hospital, unless the undesirable policy is pursued of increasing the Mohansic and Long Island State Hospitals to the already unwieldy size of the Manhattan, Kings Park and Central Islip State Hospitals.

TWENTY-SECOND ANNUAL REPORT OF THE
State Charities Aid Association — Annual Report
REPORTS OF VISITORS TO STATE HOSPITALS

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL

A meeting of the Visiting Committee of the State Charities Aid Association was held at the Middletown State Homeopathic Hospital at Middletown on Saturday, November 26, 1910. There were present Messrs. McMonagle and Wilcox of Middletown and Mr. and Mrs. Paul Tuckerman of Tuxedo. In the temporary absence of Dr. Ashley, Dr. Woodman accompanied the committee.

The census was 1,991. The new building for acute cases, known as Ashley Hall, was first visited. It has been finished this year, with a capacity of 100, and the number of patients was already near that limit. The exterior is good and the interior light and cheerful, although a little more space in some ways would have been desirable. The dining-rooms, for instance, are too small to accommodate all the patients, many of whom, though up and dressed, have to eat from trays. Furthermore these trays have to be carried through the dining-rooms before the patients are seated at table. It would have saved labor and given better service if the architect had allowed a little more space. In other respects the building is very satisfactory. In each of the male wards of Ashley Hall a female nurse is employed in addition to the regular men nurses.

In the main building dinner was being served in several wards and seemed to be of a satisfactory character. The amount of milk allowed each patient, however, might well be increased, and we think it desirable to heat the plates and use every precaution to serve the food hot where the distance from the kitchen is so great.

The day rooms in Annex 1 and 2 are now in use and are an immense improvement, being light and airy. More covering might be allowed those patients in bed out of doors on the balconies during the day. A sheet, two thicknesses of blankets and a white spread, with a flannel head covering, seem a little scant during cold weather.

In the west wing, where the chronic patients live, everything seems to be in good order. Although the majority of these patients are incapable of dressing themselves properly, their general appearance was neat, and an examination of the heads and hands of

State Charities Aid Association — Annual Report

some indicated a careful attention to their physical needs. The walls were being painted three-quarters of the way to the ceiling, as the appropriation was not sufficient to permit of its being carried up to the ceiling.

A fair was held early in November for the sale of patients' work. About \$300 was realized, which is to be expended as an amusement fund for the patients. Some of the work was good, especially the hemstitching and knitting. The chrysanthemums shown at the fair were very fine and came from the new green-houses.

The new staff house, which is about five minutes' walk, was visited and seems very well suited for its purpose, being solidly built and well arranged inside, and it must be a relief to these doctors to get away from hospital surroundings. Dr. Woodman, the first assistant physician, is also in the new house provided for him.

The kitchen, bakery, butcher shop, refrigerators, etc., were all examined and found to be in excellent order.

Throughout the hospital, in fact, there was the usual indication of an institution well administered, in which the interests of the State were safeguarded and the welfare of the patients was sought and attained.

H. K. WILCOX,
D. C. McMONAGLE,
SUSAN TUCKERMAN,
PAUL TUCKERMAN.

BUFFALO STATE HOSPITAL

While the population of the Buffalo State Hospital is somewhat in excess of what is considered its proper capacity, the overcrowding is not so great as in some of the other institutions. The average population for the year amounts to 1,933. The record of recoveries, it is reported, are gratifying.

Only a few additions or changes have been made since the last report, but those few have been of value and importance. The opening of the pavilion for the reception of women patients suffering from tuberculosis marked a distinct step forward in the

State Charities Aid Association — Annual Report

care of this class of patients. Sixteen women can be accommodated in this pavilion, which is very complete in its equipment. The results obtained show how valuable this acquisition has already become, and the committee trusts that provision will be made at once for the construction of a similar pavilion for the housing and care of the male patients suffering from tuberculosis.

An attractive brick building situated at the westerly end of the hospital grounds on Forest avenue has been completed and is already occupied by the steward and his family. New baths of different kinds have been placed in the Elmwood buildings, which make it possible to carry out the latest modern ideas of treatment.

The splendid results obtained from the renting of the farms at Wilson are most encouraging, both in the physical and mental improvement observed in the patients, and also in the returns to the hospital of the farm and garden products, which amounted to the value of \$733.95. The purchase of this farm of thirty-three acres for the sum of \$6,500 to be used as an annex to the State Hospital seems very advisable. The committee cannot but feel that the benefits derived by the patients will far exceed the money value of the purchase. The special requests for the year, aside from those already mentioned, are mainly for necessary plumbing, new verandas for both the men and women's wards to permit of more out-of-door life, the refrigerating plant, which has been included in the budget for a number of years and which is most important, and a proper building for the care of contagious cases. These represent the largest items of expense. The request list is not a long or extravagant one, and the committee earnestly hopes that the Legislature may grant an appropriation sufficient for these expenditures.

Dr. Henry P. Frost, first assistant physician, resigned after many years of faithful, conscientious executive service to accept the position of superintendent of the Boston Hospital. There can be no question as to Dr. Frost's fitness for this important position, and the committee wishes Dr. Frost every success in his new undertaking. His successor has not yet been appointed, the position at present being subject to a civil service examination which takes place some time in November. Inspection of the many de-

State Charities Aid Association — Annual Report

partments of the hospital at different times only confirms the belief that there is little to criticise and much to commend. The diet and clothing of the patients seems uniformly good and satisfactory. It has been a pleasure to notice from time to time the kindness and consideration shown to the patients by some of the attendants. The committee feels confident that the administration of the Buffalo State Hospital is honest, economical and humane.

FANNY H. BARTOW,
GEORGE A. LEWIS,
CHARLES SUMNER JONES,
ESTHER K. McWILLIAMS,
ADA M. KENYON.

BINGHAMTON STATE HOSPITAL

October 18th was the day set by your appointee for the visit to the Binghamton State Hospital, its colonies and camp.

The weather was perfect. The visit began in the early morning and was not ended until dark. Our idea was that, for one day at least we represented the hundreds of citizens of this State who want to *know* and who have a right to know that their relatives and friends whose home is "On the Hill" are cared for as they would wish to have them cared for. Our visit would be a farce if we did not sharpen our senses to note any failure of act or intent on the part of the management to do its whole duty by the patients. We came away more than ever convinced that those who have loved ones living as patients at the Binghamton State Hospital may rest perfectly content that those dear to them have the best possible care and treatment. Had we seen any abuses or neglect we would count it our plain duty to set it plainly forth in our report.

On this visit we even went so far (as we never have done before) as to select quiet and intelligent patients, of both sexes, to ask of them in private and under pledges of confidence and secrecy if they had any complaints or suggestions to make. All expressed themselves entirely satisfied with the treatment and care they received. We spent the forenoon in visiting each ward in the main

State Charities Aid Association — Annual Report

building and the additions thereto; the north building; Edgewood (the building for tuberculosis patients); Plymouth Rock colony and Pine camp. The last was perhaps the most interesting feature of our visit. We were impressed by the studious care not only for the comfort of patients at this outlying summer colony, but also for their pleasure. Hundreds of women patients have received marked benefit at the camp this season, above what they would have received in the wards; and since September 1st about 150 men have had like privileges. The camp has proven itself a necessary adjunct to the hospital and has repaid many fold all it has cost in expense and added labor.

We lunched at the Camp and enjoyed it immensely. The diet is more varied there than in the wards, and this feature, with the beautiful setting of lawn, trees and river view; the boating, fishing, bathing and nightly camp fire, all combine to make a vacation at Pine camp an incentive to patients.

After luncheon we went to Parkhurst and inspected the model stables and dairy. Pure milk in generous quantity is such an important feature in caring for patients that we feel sure all care and expense put upon the dairy is fully warranted. Next we visited "Morning Side" and found it, as always, a comfortable home for women patients. "Orchard House" came next and we found nothing to criticize.

We then returned to the main office and were accompanied by the superintendent in a round of visits to "Fairmont" (the building for acute patients); the south building; and the east building. In all these we found the routine work proceedings smoothly and every nook and corner neat and orderly.

We visited all departments of "Ferris Hall," the home for nurses and attendants, and were much impressed by the care and foresight shown to make the inmates comfortable and happy when off duty.

At the green houses we were impressed by excellent work done in a department that makes it possible to furnish all parts of the institution with vegetables and plants and flowers; and all at very little expense. The effect of cut flowers and potted plants in all the wards has a marked beneficial effect upon the patients, by giving a cheerful, homelike atmosphere instead of a bare, institutional look.

State Charities Aid Association — Annual Report

We were pleased to find that precautions against fires had been undertaken with a new zeal, by a reorganization of the already very efficient fire department and by regular fire drills. That this important matter has not been neglected in the past is proven by the fact that patients' lives have never been in danger by any serious fire since the first days of this hospital.

The thorough work in the pathological department impressed us very much, and we are sure that a generous appropriation to facilitate this work is fully warranted.

The census shows what a large institution the Binghamton Hospital has grown to be — 2,363 patients, with attendants and employees of all classes, makes a community of nearly 3,000 souls. Such a large group of people with all the complex problems that arise because of its peculiar nature, calls for the best thought and care that can be given by those in charge. We are sure that if the management is enabled to carry out its plans by liberal appropriations the hospital will go on to even greater efficiency than it shows to-day.

CLARA A. HOLMES,
F. H. HASKINS,
CHARLES E. LEE.

ST. LAWRENCE STATE HOSPITAL

Owing to the illness of Mr. Knowlton, the board of visitors of the St. Lawrence State Hospital was deprived of the valuable aid of Mr. and Mrs. Knowlton, when the annual visitation was made this year. Mrs. Knowlton's kindly interest in the female patients has been a great assistance and was particularly missed.

During the year, Mr. Irving has made several visits to the hospital, and a very agreeable one was the occasion of the graduating exercises of the class of nurses from the training school for this year. At Dr. Hutchings' request, he delivered the address to the class of seven graduating nurses, and was much impressed by the thoroughness with which the work of fitting young women for the work of nursing is being done by the school. While the graduates are fitted for the general work of nursing, special experience naturally comes to them in the care of those afflicted with mental

State Charities Aid Association — Annual Report

and nervous disorders, and they are, consequently, better equipped for work of that nature than those who graduate from schools connected with general hospitals. Dr. Hutchings informed us that an examination, conducted by a committee composed of medical men not connected with the hospital, showed a standard of proficiency of almost 100 per cent. in the two highest classes, a fact that speaks well for the intelligence of the young women and also for the efficiency of their teachers.

We found the usual satisfactory conditions prevailing in the management of the hospital, in regard to both the medical care of the patients and their personal comfort. The business affairs seemed in an equally satisfactory condition, and there was apparent a spirit of concord and loyalty in all the departments, without which an institution of this nature could not be successfully carried on. The new steward, Mr. Webb, appointed since our last report, has assumed his duties, and is carrying out with vigor and intelligence, the work of his predecessor, Mr. Hall, who for so long a period was in charge of this department.

The appropriations asked for this year include several of particular merit. The new building asked for to house the carpenter and the blacksmith is badly needed, and there should be no delay in erecting it. These two men are very important employees and are working under a great disadvantage at present. The carpenter is located over the dynamo room at the power and lighting plant, where the room is needed for the proper working of the electric machinery, and the blacksmith has to perform his duties largely in the open air. We venture to hope that any new buildings erected in the future, will be of fireproof material, and as the State owns a good stone quarry, and suitable stone pit and a stone crusher, and can moreover furnish all of the unskilled labor without cost, concrete buildings can be built at a minimum cost. Wooden buildings, aside from the danger of fire, look out of place, and are not in harmony with the original plans adopted when the hospital was built.

Another request which seems reasonable is that of \$2,400 for the purchase of machinery to handle the coal for the heating, lighting and power plant. At present all the coal used must be wheeled from the coal pile by hand barrow, and it is proposed to install an

State Charities Aid Association — Annual Report

outfit by which the most laborious part of this work can be done by machinery. In the coldest weather the consumption of coal runs as high as sixty tons a day, and it has always been difficult to induce the patients to do this work.

We repeat our opinion, expressed in our reports for the last three years, that the State should own the 206 acres of land adjoining the farm, and which is now being rented. The State holds an option for the purchase of this land at a fair price, and we think it good business policy to secure the land before the expiration of the option. The last Legislature appropriated a sum for the purpose, but the item was vetoed by Governor Hughes without giving any reason for his action.

Congestion still continues in the sleeping quarters of the employees and it is very properly asked that one of the two wings provided in the plans of the recently erected building, "Eastwood" be completed this coming summer. Rooms badly needed by the patients are at present being used by employees.

The census of the hospital shows an increase of nearly 100, a condition to be deplored, considering that, while the capacity of the hospital is 1,806, the number of patients on the 30th of September was nearly 2,000.

Dr. Hutchings has asked the health officers for the hospital district to meet him in conference, for the purpose of considering the recent amendments to the law covering the care of the insane previous to their admission to the hospitals. It is expected that much good will result from this meeting, and that this very much needed change in the law may result in a more humane and intelligent treatment of those afflicted with mental troubles, prior to their being admitted to the State hospitals. These reforms come slowly and there is still much room for improvement, especially in providing suitable places where these unfortunates can be detained while the necessary legal steps are being taken for their commitment.

We acknowledge with much appreciation, the courtesy of the officials connected with the hospital while we were making our examination, and are glad to be able to commend their zeal and devotion to duty.

FRANK CHAPMAN,
ANDREW IRVING.

State Charities Aid Association — Annual Report

GOWANDA STATE HOMEOPATHIC HOSPITAL.

Within a year the new tuberculosis hospital has been built and fifty patients have been taken there — apparently as many as the building will accommodate. Here the patients were mostly sitting out upon the veranda, only a few occupying the beds. Twenty-four of these patients were able to go into the bright, cheery, sunny dining-room for their meals while the rest use trays. A bookcase of books supplies these patients with books which are not used elsewhere. All clothing is disinfected before going to the general laundry. All verandas on both buildings are to be enclosed in glass when the weather becomes too cool for those sitting or sleeping outside.

In a beautiful grove near the hospital where patients have sat this summer, a new pavilion is being built, 90 feet long and 30 feet wide. This building in the woods is for the use of patients who need exercise in the winter time. While it will not be warm, large fireplaces at either end will remove the chill and make it sufficiently warm with wraps. Amusements are given the patients twice weekly — every Monday evening either dancing or a concert and on Friday evening moving pictures — the hospital owning the machine.

The kitchen at Gowanda, while sufficiently large for 350 patients, is found to be somewhat small for 1,080 patients, the present number. A new storeroom built the past year is commodious and adds greatly to the comfort of the place, as well as the fine cold storage or refrigerator plant which has recently been added, and contains a storage room for eggs, another for beef, etc., all at a proper temperature. A work building has also been completed which was much needed. The first floor is used as carpenter shop and general repair rooms and on the second floor work of all kinds is carried on most successfully. A competent headman superintends the eighteen or twenty workmen who are patients; men are employed picking over and cleansing hair; others are busy tying the fine looking mattresses, for hair mattresses are the only ones used for the 1,080 patients, and these require frequent recovering; pillows, awnings, shoes, baskets, hampers, whisk brooms, brushes, chair seating and many other things are made in this big workshop.

State Charities Aid Association — Annual Report

Large flower beds and gardens have been made which supply the rooms and wards with flowers. The pansies were so plentiful in the great beds that the patients were allowed to go out and help themselves.

The State has hired 150 acres of land this year, of which half was pasture land, and on the other half potatoes, peas, oats and sweet corn were planted. The hay that was cut from the pasture half very nearly paid for the rental of the whole, so that what was raised was nearly all profit. All vegetables used for the hospital are raised there, and tomatoes used in the winter are canned in the house. This year an arrangement has been made with a canning factory to put up corn on shares, the hospital furnishing the corn.

Owing to the high prices prevailing, the expenses per capita have been a trifle higher this year than usual.

In the spring, in March, April and May, there was an epidemic of scarlet fever — there being seventy cases.

A superintendent of nurses has been engaged and is expected next week, who will devote her entire time to the training of nurses. These nurses will be sent during their course of training either to the Buffalo General Hospital, or to Rochester, for special courses. Then the Gowanda school will become a *registered* training school of which there are but few in the State.

MARY A. L. BOOKSTAVEN.

STATISTICS

[301]

Statistics of the Insane

TABLE 1.—General statistics of the State hospitals for the insane for the year ending September 30, 1910

	UTICA			WILLARD			HUDSON RIVER			MIDDLETOWN		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	672	716	1,388	1,150	1,227	2,377	1,262	1,681	2,943	609	1,154	1,763
Admitted during the year:												
By commitment:												
First admissions.....	133	120	253	113	96	209	209	207	416	73	74	147
Readmissions.....	35	24	59	13	17	30	45	44	89	30	40	70
Voluntary:												
First admissions.....	5	1	6	2	2	4	22	9	31	1	4	5
Readmissions.....	2	1	3	1	.....	1	9	7	16	2	3	5
By transfer from other institutions for the insane.....	9	10	19	5	1	6	36	19	55	65	98	163
Total admitted during the year.....	184	156	340	134	116	250	321	286	607	171	219	390
Total under treatment during the year.....	856	872	1,728	1,284	1,343	2,627	1,583	1,967	3,550	780	1,373	2,153
Daily average population.....	678	725	1,403	1,156	1,217	2,373	1,271	1,685	2,956	632	1,187	1,819
Rated capacity of the institution.....	718	725	1,443	1,147	1,210	2,357	1,242	1,533	2,825	662	1,203	1,865
Discharged during the year:												
As recovered.....	52	32	84	22	25	47	62	51	113	30	45	75
As much improved*.....	11	4	15	1	1	2	21	12	33	4	7	11
As improved*.....	36	29	65	11	8	19	23	30	53	24	19	43
As unimproved*.....	11	9	20	4	6	10	20	9	29	12	14	26
As not insane:												
Inebriates.....	.....	.....	.....	.....	.....	.....	7	4	11	.....	.....	.....
Drug habits.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Others not insane.....	1	.....	1	.....	.....	.....	6	5	11	.....	.....	.....
Died.....	55	55	110	85	84	169	138	132	270	39	59	98
Transferred to other institutions for the insane.....	1	.....	1	2	.....	2	6	6	12	8	4	12
Total discharged during the year.....	167	129	296	125	124	249	283	250	533	117	148	265
Remaining under treatment:												
Committed patients:												
Supported by the State.....	621	644	1,265	1,100	1,148	2,248	1,200	1,568	2,768	548	1,069	1,617
Reimbursing patients.....	54	74	128	57	68	125	76	129	205	58	72	130
Private patients.....	13	23	36	.....	3	3	7	13	20	57	82	139
Voluntary patients:												
Supported by the State.....	1	1	2	2	.....	2	12	7	19	.....	2	2
Reimbursing patients.....	.....	.....	.....	.....	.....	.....	5	.....	5	.....	.....	.....
Total remaining, September 30, 1910.....	689	743	1,432	1,159	1,219	2,378	1,300	1,717	3,017	663	1,225	1,888

* Exclusive of transfers.

Statistics of the Insane

Table 1.—General statistics of the State hospitals for the insane—(Continued)

	BUFFALO			BINGHAMTON			ST. LAWRENCE			ROCHESTER		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	876	1,079	1,955	1,317	921	2,238	850	1,037	1,887	555	825	1,380
Admitted during the year:												
By commitment:												
First admissions.....	173	151	324	106	83	189	153	126	279	138	126	264
Readmissions.....	37	32	69	38	27	65	44	45	89	35	31	66
Voluntary:												
First admissions.....	12	7	19	1	2	3	19	11	30	5	3	8
Readmissions.....	10	8	18	1	1	2	5	8	13	11	10	21
By transfer from other institutions for the insane.....	11	6	17	105	54	159	1	.....	1	5	3	8
Total admitted during the year.....	243	204	447	251	167	418	222	190	412	194	173	367
Total under treatment during the year.....	1,119	1,283	2,402	1,568	1,088	2,656	1,072	1,227	2,299	749	998	1,747
Daily average population.....	861	1,072	1,933	1,355	948	2,303	882	1,053	1,935	553	848	1,401
Rated capacity of the institution.....	771	1,077	1,848	1,443	885	2,328	963	843	1,806	500	805	1,305
Discharged during the year:												
As recovered.....	69	58	127	40	28	68	56	40	96	33	47	80
As much improved*.....	8	6	14	4	13	17	6	7	13	4	11	15
As improved*.....	28	33	61	21	9	30	13	14	27	29	24	53
As unimproved*.....	13	4	17	13	6	19	14	13	27	9	6	15
As not insane:												
Inebriates.....	13	3	16	.....	.....	.....	1	.....	1	.....	.....	.....
Drug habits.....	1	3	4	.....	.....	.....	3	13	21	.....	.....	.....
Others not insane.....	.....	.....	.....	6	1	7	8	.....	3	.....	.....	.....
Died.....	84	58	142	84	57	141	65	71	136	95	56	151
Transferred to other institutions for the insane.....	1	6	7	9	4	13	5	3	8	2	1	3
Total discharged during the year.....	217	171	388	177	118	295	171	161	332	172	145	317
Remaining under treatment:												
Committed patients:												
Supported by the State.....	810	952	1,762	1,336	882	2,218	832	956	1,788	530	758	1,288
Reimbursing patients.....	70	133	203	51	77	128	54	90	144	36	82	118
Private patients.....	8	15	23	3	8	11	6	6	12	2	4	6
Voluntary patients:												
Supported by the State.....	11	9	20	.....	3	3	4	10	14	9	7	16
Reimbursing patients.....	3	3	6	.....	.....	1	5	4	9	.....	2	2
Total remaining, September 30, 1910.....	902	1,112	2,014	1,391	970	2,361	901	1,066	1,967	577	853	1,430

* Exclusive of transfers.

TABLE I—General statistics of the State hospitals for the insane—(Continued)

	GOWANDA				KINGS PARK				LONG ISLAND				MANHATTAN			
	Males	Females	Total		Males	Females	Total		Males	Females	Total		Males	Females	Total	
Remaining October 1, 1909.....	547	459	1,006		1,247	1,861	3,108		318	460	778		1,848	2,667	4,515	
Admitted during the year:																
By commitment:																
First admissions.....	91	46	137		345	338	683		107	142	249		534	487	1,021	
Readmissions.....	26	22	48		120	100	220		8	17	25		107	126	233	
Voluntary:																
First admissions.....	5	2	7		3	.....	3		6	5	11		3	8	11	
Readmissions.....	2	1	3		3	1	4		4	4	8		5	8	13	
By transfer from other institutions for the insane.....	16	66	82		21	23	44		23	20	43		32	39	71	
Total admitted during the year.....	140	137	277		492	462	954		148	188	336		681	668	1,349	
Total under treatment during the year.....	687	596	1,283		1,736	2,323	4,062		466	648	1,114		2,529	3,335	5,864	
Daily average population.....	562	508	1,070		1,296	1,931	3,227		312	439	751		1,875	2,705	4,580	
Rated capacity of the institution.....	527	445	972		1,171	1,713	2,884		333	322	655		1,287	2,313	3,600	
Discharged during the year:																
As recovered.....	41	21	62		88	97	185		36	43	79		142	171	313	
As much improved*.....	5	7	12		14	21	35		8	7	15		29	20	49	
As improved*.....	18	9	27		63	38	101		16	20	36		50	94	144	
As unimproved*.....	10	7	17		35	30	65		5	11	16		74	57	131	
As not insane:																
Inebriates.....	4	.....	4		1	.....	1		.....	.....	.....		.....	.....	.....
Drug habits.....	1	.....	1		.....	.....	.....		.....	.....	.....		.....	.....	.....
Others not insane.....	1	.....	1		3	1	4		1	.....	2		6	3	9	
Died.....	43	29	72		139	131	270		53	89	142		216	205	421	
Transferred to other institutions for the insane.....	5	2	7		90	20	110		34	37	71		115	97	212	
Total discharged during the year.....	138	76	204		433	338	771		153	208	361		632	647	1,279	
Remaining under treatment:																
Committed patients:																
Supported by the State.....	523	477	1,000		1,197	1,810	3,007		282	355	637		1,777	2,488	4,265	
Reimbursing patients.....	34	39	73		107	175	282		30	81	111		115	194	309	
Private patients:																
Voluntary patients:																
Supported by the State.....	1	1	2		2	.....	2		.....	4	4		4	6	10	
Reimbursing patients.....	1	1	2		.....	.....	.....		1	.....	1		1	.....	1	
Total remaining, September 30, 1910.....	559	520	1,079		1,306	1,985	3,291		313	440	753		1,897	2,688	4,585	

* Exclusive of transfers.

Statistics of the Insane

Table 1—General statistics of the State hospital for the insane—(Concluded)

	CENTRAL ISLIP			MOHANSIC			ALL HOSPITALS		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	2,483	1,542	4,025	.....	.....	.....	13,734	15,629	29,363
Admitted during the year:									
By commitment:									
First admissions.....	695	557	1,252	.....	.....	.....	2,870	2,553	5,423
Readmissions.....	152	172	324	.....	.....	.....	690	697	1,387
Voluntary:									
First admissions.....	3	.....	3	.....	.....	.....	87	54	141
Readmissions.....	6	2	8	.....	.....	.....	61	54	115
By transfer from other institutions for the insane.....	19	14	33	13	.....	13	361	353	714
Total admitted during the year.....	875	745	1,620	13	.....	13	4,069	3,711	7,780
Total under treatment during the year.....	3,358	2,287	5,645	13	.....	13	17,803	19,340	37,143
Daily average population.....	2,564	1,600	4,164	12	.....	12	14,009	15,018	29,027
Rated capacity of the institution.....	2,504	1,492	3,996	12	.....	12	13,280	14,616	27,896
Discharged during the year:									
As recovered.....	144	115	259	.....	.....	.....	815	773	1,588
As much improved*.....	111	54	165	.....	.....	.....	226	170	396
As improved*.....	89	106	195	.....	.....	.....	421	433	854
As unimproved*.....	90	58	157	.....	.....	.....	319	230	549
As not insane:									
Inebriates.....	.....	.....	.....	.....	.....	.....	26	7	33
Drug habits.....	.....	.....	.....	.....	.....	.....	5	4	9
Others not insane.....	1	1	2	.....	.....	.....	33	26	59
Died.....	271	143	414	.....	.....	.....	1,367	1,109	2,536
Transferred to other institutions for the insane.....	60	155	215	1	.....	1	339	335	674
Total discharged during the year.....	775	632	1,407	1	.....	1	3,551	3,147	6,698
Remaining under treatment:									
Committed patients:									
Supported by the State.....	2,467	1,507	3,974	12	.....	12	13,235	14,614	27,849
Reimbursing patients.....	111	148	259	.....	.....	.....	853	1,362	2,215
Private patients.....	.....	.....	.....	.....	.....	.....	96	156	252
Voluntary patients:									
Supported by the State.....	5	.....	5	.....	.....	.....	51	50	101
Reimbursing patients.....	.....	.....	.....	.....	.....	.....	17	11	28
Total remaining, September 30, 1910.....	2,583	1,655	4,238	12	.....	12	14,252	16,193	30,445

* Exclusive of transfers.

Statistics of the Insane

TABLE 2—General statistics of the State hospitals for the criminal insane for the year ending September 30, 1910

	MATTEWAN			DANNEMORA			TOTAL		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	627	132	759	368	.....	368	995	132	1,127
Admitted during the year:									
First admissions.....	58	15	73	55	.....	55	113	15	128
Readmissions.....	4	3	7	2	.....	2	6	3	9
By transfer from other institutions for the insane.....	6	1	7	.....	.....	.....	6	1	7
Total admitted during the year.....	68	19	87	57	.....	57	125	19	144
Total under treatment during the year.....	696	150	846	425	.....	425	1,121	150	1,271
Daily average population.....	637	136	773	376	.....	376	1,013	136	1,149
Rated capacity of the institution.....	470	80	550	325	.....	325	795	80	875
Discharged during the year:									
As recovered.....	9	2	11	30	.....	30	39	2	41
As much improved.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
As improved.....	18	6	24	4	.....	4	22	6	28
As unimproved.....	3	.....	3	.....	.....	.....	3	.....	3
As not insane.....	2	.....	2	.....	.....	.....	4	.....	4
Died.....	20	4	24	6	.....	6	26	4	30
Transferred to other institutions for the insane.....	3	.....	3	1	.....	1	4	.....	4
Total discharged during the year.....	55	12	67	43	.....	43	98	12	110
Total remaining under treatment September 30, 1910.....	641	138	779	382	.....	382	1,023	138	1,161

Statistics of the Insane

TABLE 3—General statistics of the licensed private institutions for the insane (committed cases only) for the year ending September 30, 1910

	BLOOMINGDALE			PROVIDENCE RETREAT			MARSHALL SANCTUARY			LONG ISLAND HOME		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	147	175	322	34	90	124	19	34	53	33	42	75
Admitted during the year:												
By commitment:												
First admissions.....	22	22	44	15	23	38	2	1	3	10	10	20
Readmissions.....	25	15	40	2	6	8	3	.....	3	2	6	8
Voluntary cases committed.....	.....	.....	.....	1	3	4	9	7	16	2	2	4
By transfer from other institutions for the insane.....	6	3	9	.....	6	6	1	1	2	5	6	11
Total admitted during the year.....	53	40	93	18	38	56	15	9	24	19	24	43
Total under treatment during the year.....	200	215	415	52	128	180	34	43	77	52	66	118
Daily average population.....	151	171	325	35	93	128	20	30	50	34	47	81
Discharged during the year:												
As recovered.....	9	10	19	6	16	22	2	3	5	4	4	8
As much improved.....	8	10	18	.....	4	4	1	1	2	1	3	4
As improved.....	3	1	4	3	6	9	3	1	4	2	5	6
As unimproved.....	1	1	2	3	5	8	.....	.....	.....	2	.....	2
As not insane.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Died.....	14	10	24	3	2	5	5	5	10	6	2	8
Transferred to other institutions for the insane.....	10	12	22	3	3	6	5	6	11	3	2	5
Total discharged during the year.....	45	44	89	18	36	54	17	16	33	17	16	33
Total remaining under treatment September 30, 1910.....	155	171	326	34	92	126	17	27	44	35	50	85

Statistics of the Insane

TABLE 3.—General statistics of the licensed private institutions for the insane (committed cases only)—(Continued)

	BRIGHAM HALL			SANFORD HALL			ST. VINCENT RETREAT			BREEZEHURST TERRACE		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	27	32	59	17	23	40	.....	103	103	9	14	23
Admitted during the year:												
By commitment:												
First admissions.....	12	13	25	5	4	9	.....	15	15	5	3	8
Readmissions.....	1	3	4	.....	1	1	.....	11	11	.....	.....	.....
Voluntary cases committed.....	3	2	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
By transfer from other institutions for the insane.....	2	.....	2	.....	1	1	.....	9	9	.....	.....	.....
Total admitted during the year.....	18	18	36	5	6	11	.....	35	35	5	3	8
Total under treatment during the year.....	45	50	95	22	29	51	.....	138	138	14	17	31
Daily average population.....	22	31	53	15	21	36	.....	110	110	15	10	25
Discharged during the year:												
As recovered.....	2	4	6	.....	3	3	.....	7	7	.....	.....	.....
As much improved.....	5	3	8	.....	.....	.....	.....	.....	.....	.....	1	1
As improved.....	3	2	5	1	2	3	.....	5	5	.....	.....	.....
As unimproved.....	1	2	3	1	.....	1	.....	3	3	.....	.....	.....
As not insane.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Died.....	5	7	12	6	2	8	.....	5	5	2	.....	2
Transferred to other institutions for the insane.....	9	4	13	1	2	3	.....	4	4	1	2	3
Total discharged during the year.....	26	22	48	9	9	18	.....	24	24	3	3	6
Total remaining under treatment September 30, 1910.....	19	28	47	13	20	33	.....	114	114	11	14	25

Statistics of the Insane

Table 3—General statistics of the licensed private institutions for the insane (committed cases only)—(Continued)

	WALDEMER			GREENMONT-ON-THE-HUDSON			DR. MACDONALD'S HOUSE			THE PINES		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	3	2	5	1	2	3	5	11	16	3	8	11
Admitted during the year:												
By commitment:												
First admissions.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Voluntary cases committed.....	.....	1	1	.....	.....	.....	1	1	2	2	.....	2
By transfer from other institutions for the insane.....	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....
Total admitted during the year.....	1	1	2	1	2	3	3	1	4	2	.....	2
Total under treatment during the year.....	4	3	7	1	2	3	8	12	20	5	8	13
Daily average population.....	3	2	5	1	2	3	6	11	17	2	8	10
Discharged during the year:												
As recovered.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	3
As much improved.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....
As improved.....	.....	1	1	.....	.....	.....	1	.....	2	.....	.....	.....
Died.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	2
Transferred to other institutions for the insane.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Total discharged during the year.....	.....	1	1	.....	1	1	1	2	3	4	1	5
Total remaining under treatment September 30, 1910.....	4	2	6	1	1	2	7	10	17	1	7	8

Statistics of the Insane

TABLE 3—General statistics of the licensed private institutions for the insane (committed cases only)—(Continued)

	VERNON HOUSE			INTERPINES			GLENMARY			RIVER CREST		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	2	2	4	3	9	12	3	14	17	53	62	115
Admitted during the year:												
By commitment:												
First admissions.....	.....	.....	.....	.....	2	2	.....	4	9	11	16	27
Readmissions.....	.....	.....	.....	.....	.....	.....	.....	1	1	3	2	5
Voluntary cases committed.....	.....	.....	.....	.....	.....	4	.....	.....	.....	30	27	57
By transfer from other institutions for the insane.....	.....	.....	.....	2	3	5	.....	.....	.....	9	4	13
Total admitted during the year.....	2	2	4	2	9	11	5	5	10	53	49	102
Total under treatment during the year.....	2	2	4	5	18	23	8	19	27	106	111	217
Daily average population.....	2	2	4	2	10	12	4	14	18	50	52	102
Discharged during the year:												
As recovered.....	.....	.....	.....	1	1	2	.....	.....	.....	6	10	16
As much improved.....	.....	.....	.....	1	.....	1	.....	.....	.....	6	6	12
As improved.....	.....	.....	.....	.....	.....	.....	1	2	3	17	15	32
As unimproved.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	6	9
Died.....	1	.....	1	.....	1	1	.....	1	3	4	8	12
Transferred to other institutions for the insane.....	.....	.....	.....	2	2	4	2	1	3	13	14	27
Total discharged during the year.....	1	.....	1	4	4	8	5	4	9	49	59	108
Total remaining under treatment September 30, 1910.....	1	2	3	1	14	15	3	15	18	57	52	109

Statistics of the Insane

Table 3.—General statistics of the licensed private institutions for the insane (committed cases only)—(Continued)

	DR. COMBES' SANITARIUM			DR. KELLOGG'S HOUSE			KNICKERBOCKER HALL			DR. BOND'S HOUSE		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	12	20	32	.....	2	2	.....	13	13	2	1	3
Admitted during the year:												
By commitment:												
First admissions.....	11	16	27	.....	1	1	.....	1	1	3	.....	3
Readmissions.....	1	5	6	.....	.....	.....	.....	5	5	.....	1	.....
Voluntary cases committed.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
By transfer from other institutions for the insane.....	2	5	7	.....	.....	.....	.....	1	1	1	1	2
Total admitted during the year.....	14	26	40	.....	1	1	.....	7	7	4	2	6
Total under treatment during the year.....	26	46	72	.....	3	3	.....	20	20	6	3	9
Daily average population.....	14	21	35	.....	2	2	.....	13	13	2	2	4
Discharged during the year:												
As recovered.....	2	4	6	.....	.....	.....	.....	2	2	.....	.....	.....
As much improved.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
As improved.....	5	8	13	.....	1	1	.....	1	1	.....	.....	.....
As unimproved.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Died.....	2	4	6	.....	.....	.....	.....	.....	.....	1	.....	1
Transferred to other institutions for the insane.....	4	4	8	.....	.....	.....	.....	.....	.....	1	.....	1
Total discharged during the year.....	13	24	37	.....	1	1	.....	3	3	2	.....	2
Total remaining under treatment September 30, 1910.....	13	22	35	.....	2	2	.....	17	17	4	3	7

Statistics of the Insane

Table 3.—General statistics of the licensed private institutions for the insane (committed cases only)—(Concluded)

	RIVERVIEW SANITARIUM			WEST HILL			TOTAL		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Remaining October 1, 1909.....	4	4	5	9	14	378	672	1,050
Admitted during the year:									
By commitment:									
First admissions.....	9	8	17	113	139	252
Readmissions.....	50	.....	1	.....	1	38	88	126
Voluntary cases committed.....	53	.....	.....	1	1	46	53	99
By transfer from other institutions for the insane.....	30	41	71
Total admitted during the year.....	10	9	19	227	283	510
Total under treatment during the year.....	4	4	15	18	33	605	955	1,560
Daily average population.....	4	4	5	8	13	383	667	1,050
Discharged during the year:									
As recovered.....	2	4	6	86	69	155
As much improved.....	1	1	1	1	2	23	34	57
As improved.....	4	4	38	55	93
As unimproved.....	2	.....	2	13	18	31
As not insane.....	2	.....	2
Died.....	1	1	1	.....	1	54	48	102
Transferred to other institutions for the insane.....	5	2	7	59	59	118
Total discharged during the year.....	2	2	11	11	22	225	283	508
Total remaining under treatment September 30, 1910.....	2	2	4	7	11	380	672	1,052

Statistics of the Insane

TABLE 4.—Number of patients in institutions for the insane in New York State, annual increase and ratio of patients to population, 1889—1910

Year*	NUMBER OF PATIENTS										INCREASE OVER PRECEDING YEAR				NUMBER OF PATIENTS TO EACH 1,000,000 POPULATION				Percentage over preceding year of ratio of insanity to population
	STATE HOSPITALS†					CRIMINAL INSANE													
	PRIVATE INSTITUTIONS			TOTAL		TOTAL			TOTAL										
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total				
1889	6,687	7,718	14,405	326	523	849	203	16	219	7,216	8,257	15,473	239.3	270.9	255.2	1.61			
1890	6,961	7,991	14,952	330	488	818	218	18	236	7,509	8,497	16,006	244.7	273.9	259.3	2.24			
1891	7,287	8,276	15,563	349	501	850	222	17	239	7,858	8,794	16,652	251.6	278.5	265.1	2.72			
1892	7,562	8,609	16,171	358	524	882	326	22	348	8,246	9,155	17,401	269.5	285.0	272.3	3.67			
1893	7,984	9,030	17,014	384	542	926	381	30	411	8,749	9,602	18,351	270.6	293.8	282.3	2.30			
1894	8,424	9,392	17,816	332	487	819	416	37	453	9,172	9,916	19,088	279.0	298.4	288.8	4.16			
1895	8,894	9,961	18,855	351	496	847	477	37	514	9,722	10,494	20,216	290.9	310.6	300.8	1.60			
1896	9,164	10,314	19,478	335	497	832	521	38	359	10,020	10,849	20,869	298.5	316.0	305.6	2.23			
1897	9,571	10,640	20,211	326	514	840	587	45	632	10,484	11,199	21,683	303.8	321.0	312.4	1.66			
1898	9,896	10,959	20,845	330	525	855	638	48	686	10,854	11,532	22,386	307.0	333.0	325.4	1.26			
1899	10,121	11,253	21,374	382	548	930	666	53	719	11,169	11,854	23,023	315.5	322.6	313.7	1.71			
1900	10,422	11,666	22,088	373	565	938	698	54	752	11,493	12,285	23,778	324.4	331.7	326.1	0.06			
1901	10,755	11,899	22,654	373	554	927	676	57	733	11,804	12,510	24,314	311.1	335.0	327.3	0.81			
1902	10,966	12,283	23,269	373	556	929	720	72	792	12,079	12,911	24,990	275.4	338.5	327.3	1.64			
1903	11,445	12,742	24,187	372	575	947	725	75	800	12,542	13,392	25,934	282.5	343.8	329.3	1.49			
1904	11,789	13,230	25,019	380	618	998	761	83	844	12,930	13,931	26,861	282.5	350.4	339.7	0.40			
1905	11,994	13,524	25,518	387	618	985	814	89	903	13,175	14,231	27,406	282.5	350.9	339.7	1.27			
1906	12,331	14,022	26,353	363	622	985	854	106	960	13,543	14,754	28,297	328.4	356.7	344.0	0.84			
1907	12,680	14,422	27,102	343	634	977	904	110	1,014	13,927	15,166	29,093	331.1	356.7	346.9	2.74			
1908	13,313	15,035	28,348	373	663	1,036	962	121	1,073	14,638	15,819	30,457	339.9	359.7	349.9	1.66			
1909	13,754	15,628	29,383	378	672	1,050	995	132	1,127	15,107	16,433	31,540	344.4	368.2	356.4	1.74			
1910	14,252	16,193	30,445	380	672	1,052	1,023	138	1,161	15,655	17,003	32,658	355.1	385.9	369.6				

* October 1 of each year.

† Inclusive of patients in county almshouses prior to 1894 and in county asylums prior to 1896.

Statistics of the Insane

TABLE 5.—Number of admissions to institutions for the insane in New York State, exclusive of transfers, and rate per million of the population, 1897—1910

Year*	STATE HOSPITALS			PRIVATE INSTITUTIONS			CRIMINAL INSANE			TOTAL		
	Males	Females	TOTAL	Males	Females	Total	Males	Females	Total	NUMBER		
										Males	Females	Total
			Per 1,000,000 population									PER 1,000,000 POPULATION
1897.....	2,273	2,097	4,370	4227	4271	4498	133	7	140	2,633	2,375	5,008
1898.....	2,267	2,206	4,473	4207	4251	4458	119	10	129	2,593	2,407	5,000
1899.....	2,226	2,192	4,418	4236	4237	4473	125	9	134	2,587	2,438	5,025
1900.....	2,224	2,284	4,508	4240	4275	4515	132	10	142	2,616	2,573	5,189
1901.....	2,308	2,253	4,561	4248	4228	4476	172	5	177	2,628	2,486	5,114
1902.....	2,279	2,287	4,566	4214	4237	4451	107	13	120	2,600	2,535	5,135
1903.....	2,609	2,501	5,110	4245	4276	4521	184	18	202	2,838	2,746	5,584
1904.....	2,600	2,772	5,372	4219	4276	4495	111	16	127	2,830	2,694	5,524
1905.....	2,690	2,636	5,326	4228	4263	4491	116	11	127	3,034	2,830	5,864
1906.....	2,914	2,847	5,761	4228	4226	4454	119	20	139	3,257	3,099	6,356
1907.....	3,203	2,902	6,105	4214	4251	4465	127	20	147	3,519	3,173	6,692
1908.....	3,460	3,223	6,683	4214	4288	4502	143	27	170	3,787	3,538	7,325
1909.....	3,435	3,170	6,605	198	236	434	136	27	163	3,787	3,538	7,325
1910.....	3,708	3,358	7,066	196	242	438	119	18	137	4,024	3,618	7,642

* Year ending September 30. † Inclusive of transfers. ‡ Matteawan only. § Approximate.

Statistics of the Insane

TABLE 6.—Recovery rate and death rate in the State hospitals for the insane, 1897—1910

YEAR.*	RECOVERIES				DEATHS							
	NUMBER			RATE PER 10,000 ADMIS- SIONS, EXCLUSIVE OF TRANSFERS	NUMBER			RATE PER 100,000 UNDER TREATMENT				
	Males	Females	Total		Males	Females	Total					
1897.....	503	448	951	2,213	2,136	2,176	707	705	1,502	6,897	6,324	6,598
1898.....	499	519	1,018	2,201	2,353	2,276	930	827	1,757	7,540	6,163	6,823
1899.....	521	488	1,009	2,341	2,298	2,264	973	890	1,863	7,637	6,246	6,903
1900.....	522	507	1,029	2,347	2,220	2,253	980	841	1,821	7,808	6,145	6,941
1901.....	549	600	1,149	2,379	2,929	2,643	1,010	858	1,868	7,768	6,113	6,918
1902.....	510	615	1,125	2,238	2,689	2,464	1,018	790	1,808	7,084	4,987	5,972
1903.....	607	656	1,263	2,327	2,623	2,472	994	840	1,834	7,056	5,484	6,237
1904.....	570	733	1,303	2,192	2,644	2,426	1,064	923	1,957	7,475	5,804	6,629
1905.....	705	737	1,442	2,621	2,775	2,697	1,055	962	2,017	7,056	5,784	6,386
1906.....	765	703	1,468	2,625	2,469	2,548	1,114	957	2,071	7,338	5,795	6,500
1907.....	797	760	1,557	2,488	2,619	2,550	1,209	1,049	2,258	7,642	6,997	6,779
1908.....	813	809	1,622	2,350	2,510	2,427	1,199	1,144	2,333	6,944	6,083	6,494
1909.....	788	734	1,522	2,281	2,315	2,297	1,321	1,053	2,374	7,706	5,667	6,466
1910.....	815	773	1,588	2,198	2,302	2,247	1,367	1,169	2,536	7,678	6,044	6,828

* Year ending September 30.

INDEX

- ACCIDENTS, suicides and, 105.
Accommodations, additional, 8;
needed, new, 286.
Admissions, reduction of number, 131.
Agricultural methods, food supplies
and, examination of, 285.
Agriculture, Department of, co-opera-
tion with, 73.
Alienists, board of, report, 111-126.
Aliens, 109; ages of those deported,
118; civil condition of those de-
ported, 118; deported on federal
warrants, 116; nativity of those de-
ported, 117; occupation of those
deported, 118; returned by friends
to other states, 121; returned by
State to other states, 121; sex of
those deported, 117; summary, 122.
Alleged insane, expression of medical
opinion, 56.
Appropriations, maintenance, 5.
Attendants, bravery of nurses and,
101.
Automobiles, 48.
- BINGHAMTON State Hospital, addi-
tional accommodations and im-
provements, 12; annual report,
summary, 268; appropriations, 5;
average price staple articles, 29;
capacity and census, 34; cost per
capita of maintenance, 24; em-
ployees, 32; expenditures for
maintenance, 20; fuel and light,
cost, 31; general statistics of, 306;
medical service, cost, 31; visitors'
report, 293.
Bloomingdale, general statistics of,
310.
Board of Alienists, qualifications,
285; report, 111-126.
Breezehurst Terrace, general statis-
tics of, 311.
Brigham Hall, general statistics of,
311.
Buffalo State Hospital, additional ac-
commodations and improvements,
12; annual report, summary, ap-
propriations, 5, 267; average price
of staple articles, 29; bravery of
nurses and attendants, 102; capac-
ity and census, 34; cost per capita
of maintenance, 24; employees, 32;
expenditures for maintenance, 20;
fuel and light, cost, 31; general
statistics of, 306; medical service,
cost, 31; visitors' report, 291.
Buildings, new, progressed, 33.
- CAMPS and cottages, vacation, 75.
Campbell, C. Marfie, M. B., associate
in Clinical Psychiatry, report, 160-
172.
Campbell, George B., M.D., acting
chairman, Board of Alienists, re-
port, 111-116.
Capacity and census of State hos-
pitals, 34.
Central Islip State Hospital, addi-
tional accommodations and im-
provements, 18; annual report,
summary, 279; appropriations, 6;
average price staple articles, 30;
bravery of nurses and attendants,
105; capacity and census, 34; cost
per capita of maintenance, 26; em-
ployees, 32; expenditures for main-
tenance, 22; fuel and light, cost,
31; general statistics of, 308; med-
ical service, 31.
Civil service, appointments, 42; ap-
pointment of first assistant physi-
cians, 42; eligible lists, 44;
methods, 144.
Clinical work, Psychiatric Institute,
female service, 160-172; male ser-
vice, 173-189.
Coal, determination of value, 92.
Commission in Lunacy, State, change
in personnel, 78; reduced size of
reports, 46; report, 1-110.
Commitment of alleged insane person
for examination, 283.
Conference, quarterly, of hospital su-
perintendents, 78.
Contracts, milk, metropolitan hos-
pitals, 71; joint, 71.

- Co-operation with Department of Agriculture, 73; of State Charities Aid Association, 49.
- Cost, fuel and light, State hospitals, 31; per capita of maintenance, 24-27; per capita of medical service, 31.
- Criminal insane, general statistics of State hospitals for, 309.
- DANNEMORA** State Hospital, general statistics of, 309.
- Departments other than medical and nursing, 139.
- Deportation officers, work of, 108.
- Determination of the value of coal, 92.
- Dewing, Dr. Oliver M., death of, 94.
- Doran, Robert E., M.D., Medical Inspector, report, 150-151.
- Director of Psychiatric Institute, 45.
- Disbursements, 5.
- Discharge of patients, 127.
- Dr. Bond's House, general statistics of, 314.
- Dr. Combe's Sanitarium, general statistics of, 314.
- Dr. Kellog's House, general statistics of, 314.
- Dr. MacDonald's House, general statistics of, 312.
- Dunlap, Charles B., M.D., chief associate in neuropathology, Psychiatric Institute, report, 190-260.
- EFFICIENCY** reports concerning medical officers, 74.
- Ellis Island, inspector's report, 122; statistical tables concerning mental defectives at, 124-125.
- Employees, State hospitals, statistical summary, 32.
- Estimates 1911-1912, State hospitals, 7.
- Expenditures for maintenance, comparative statement, State hospitals, 20-23.
- FIRE** protection at Utica State hospital, 47.
- Flatbush, title to land and buildings, 39.
- Food supplies and agricultural methods, examination of, 285.
- Fuel and light, cost, 31.
- GLENMARY**, general statistics of, 313.
- Gowanda State Homeopathic Hospital, additional accommodations and improvements, 15; annual report, summary, 271; appropriations, 6; average price of staple articles, 30; capacity and census, 34; cost per capita of maintenance, 26; employees, 32; expenditure for maintenance, 22; fuel and light, cost, 31; general statistics of, 307; medical service, cost, 31; visitors' report, 298.
- Greenmont-on-the-Hudson, general statistics of, 312.
- HEALTH** officers, 283.
- Henderson, D. K., M.D., assistant in Clinical Psychiatry, report, 173-189.
- Histological Laboratory, report, 190-260.
- Hoch, August, M.D., Director Psychiatric Institute, report, 152-160.
- Hospitals, general psychopathic wards, 83; medical service, 82.
- Hudson River State Hospital, additional accommodations and improvements, 10; annual report summary, 264; appropriations, 5; average price staple articles, 28; bravery of nurses and attendants, 102; capacity and census, 34; cost, per capita, of maintenance, 24; employees, 32; expenditures for maintenance, 20; fuel and light, cost, 31; general statistics of, 305; medical service, cost, 31.
- IMPROVEMENTS**, 141; extraordinary, 8.
- Insane, alleged person, medical expression, 56; commitment for examination of alleged, 283; recent legislation, affecting, 282.
- Insanity, and the liquor tax, 108; prevention of, 94.
- Interpines, general statistics of, 313.
- Investigation of private institutions, 46.
- JOINT** contracts, 71.
- KINGS** Park State Hospital, additional accommodations and improvements, 15; annual report, summary, 273; appropriations, 6; average price staple articles, 30; capacity and census, 34; cost per capita of maintenance, 26; employees, 32; expenditures for maintenance, 22; fuel and light, cost, 31; general statistics of, 307; medical service, cost, 31.
- Knickerbocker Hall, general statistics of, 314.

- LAMBERT, Charles I., M.D., associate in neuropathology, Psychiatric Institute, report, 190-260.
- Legal work, 46.
- Legislation, recent, affecting insane, 49, 282.
- Licensed private institutions, general statistics of, 310; medical inspector's report, 146.
- Liquor tax, insanity and the, 108.
- Long Island Home, general statistics of, 310.
- Long Island State Hospital, accommodations and improvements, 16; annual report, summary, 275; appropriations, 6; average price staple articles, 30; capacity and census, 34; cost per capita of maintenance, 26; employees, 32; expenditures for maintenance, 22; fuel and light, cost, 31; general statistics of, 307; medical service, cost, 31.
- MAINTENANCE, cost, 19; cost per capita, statistical summary, State hospitals, 24-27; expenditures for, 20-23.
- Manhattan State Hospital, additional accommodations and improvements, 17; annual report, summary, 276; appropriations, 6; average price staple articles, 30; bravery of nurses and attendants, 102; capacity and census, 34; cost per capita of maintenance, 26; employees, 32; expenditures for maintenance, 22; fuel and light, cost, 31; general statistics of, 307; medical service, cost, 31.
- Marshall Sanitarium, general statistics of, 310.
- Matteawan State Hospital, general statistics of, 309.
- Medical Commissioner, special report, 84.
- Medical inspectors' reports, Dr. Doran's, 150-151; Dr. Russell's, 126-149.
- Medical literary activity, 80.
- Medical officers, efficiency reports, 74; new salary schedule, 76.
- Medical opinion regarding an alleged insane person, 56.
- Medical service in hospitals, 82, 137; cost per capita, statistical summary, 31.
- Medical work, 152.
- Mental defectives at Ellis Island, statistical summary, 124-125.
- Middletown State Homeopathic Hospital, additional accommodations and improvements, 11; annual report, summary, 265; appropriations, 5; average price of staple articles, 28; capacity and census, 34; cost per capita of maintenance, 24; employees, 32; expenditures for maintenance, 20; fuel and light, cost, 31; general statistics of, 305; medical service, cost, 31; visitors' report, 290.
- Milk contracts, metropolitan hospitals, 71.
- Modern business methods desirable, 73.
- Mohansic State Hospital, 37; additional accommodations and improvements, 19; annual report, summary, 281; capacity and census, 34; employees, 32; general statistics of, 308; medical service, cost, 31.
- NON-RESIDENT insane, 110.
- Nurses, and attendants, bravery of, 101.
- Nursing service, 138.
- Overcrowding, 134.
- PHYSICIANS, appointments of first assistant, 42.
- Pines, The, general statistics of, 312.
- Policy, suggestions regarding future, 84.
- Prevention of insanity, 94.
- Price, average, staple articles, State hospitals, 28-30.
- Private institutions, 98; investigation, 46; general statistics of the, 310-315; licensing of, 286.
- Providence Retreat, general statistics of, 310.
- Psychiatric Institute, clinical work, report, 160-189; Director's report, 152-160; Histological, Laboratory report, 190-260; new Director, 45; report, general, 152-260; research work, 158.
- Psychopathic wards, general hospitals, 83.
- Receipts, 4.
- Reception hospital New York City, 36.
- Reducing size of reports, 46.
- Reimbursing patients, increase in rate for, 70.
- Research work, Psychiatric Institute, 158.
- River Crest, general statistics of, 313.

- Riverview sanitarium, general statistics of, 315.
- Rochester State Hospital, additional accommodation and improvements, 14; annual report, summary, 270; appropriations, 5; average price staple articles, 29; bravery of nurses and attendants, 102; capacity and census, 34; cost per capita of maintenance, 26; employees, 32; expenditures for maintenance, 22; fuel and light, cost, 31; general statistics of, 306; medical service, 31.
- Russell, William L., M.D., medical inspector, report, 126-149.
- ST. LAWRENCE STATE HOSPITAL, additional accommodations and improvements, 13; annual report, summary, 269; appropriations, 6; average price of staple articles, 29; capacity and census, 34; cost per capita, of maintenance, 24; employees, 32; expenditures, for maintenance, 20; fuel and light, cost, 31; general statistics of, 306; medical service, cost, 31; visitors' report, 205.
- St. Vincent's Retreat, general statistics of, 311.
- Salary schedule, new, medical officers, 76.
- Sanford Hall, general statistics of, 311.
- Staple articles, average price, statistical summary, 28-30.
- State Board of Alienists, qualifications, 285; report, 111-126.
- State Charities Aid Association, co-operation, 49; report, 282-299.
- State Commission in Lunacy, change of personnel, 78; reduced reports, 46; report, 1-110.
- "State Hospitals' Bulletin." 77.
- State Hospitals, additional accommodations, 8; average price staple articles, 28-30; capacity and census, 34; civil service methods, 144; cost per capita of maintenance, 24-27; deficiency, estimated, October 1, 1911, 35; departments other than medical and nursing, 139; determination of value of coal, 92; disbursements, 5; discharge of patients, 127; efficiency reports concerning medical officers, 74; employees, statistical summary, 32; estimates, 1011-12, expenditures for maintenances, statistical summary, 20-23; expenditures, special funds, 6; financial operations, 4; fuel and light, cost, 31; general operations, 3; general statistics of, 305-308; improvements, 141; improvements extraordinary, 8; legal work, 46; maintenance appropriations, 1910-1911, 5; maintenance cost, 19; medical inspector's reports, 127, 150; medical literary activity, 80; medical service, 82, 137; medical service, cost per capita, 31; medical work, 162; milk contracts, 71; movement of patients, 3; nursing service, 138; overcrowding, 134; policy, future, 84; receipts, 4; reduction of number of admissions, 131; reimbursing patients, increase in rates, 70; salary schedule, 76; statistical data, 42; statistical tables, 305-308; suicides, 105; summaries of reports, 261-281; treasurer's report, 4-6; trust fund, 6; unpended balances, 5; vacation camps and cottages, 75; visitors' reports, 290; voluntary admissions, 93; water supply, 81.
- Suggestions regarding future policy, 84.
- Suicides and accidents, 105.
- Superintendents' quarterly conferences, 78.
- TITLE to land and buildings at Flatbush, 39.
- Transmittal, letter of, 1-2.
- Treasurer, State Hospitals, detailed report, 4-6.
- Trust funds, 6.
- UTICA STATE HOSPITAL, additional accommodations and improvements, 9; annual report, summary, 261; appropriations, 5; average price of staple articles, 28; bravery of nurses and attendants, 101; capacity and census, 34; cost per capita of maintenance, 24; employees, 32; expenditures for maintenance, 20; fire protection, 7; fuel and light, cost, 31; general statistics of, 305; medical service, cost, 31.
- VACATION camps and cottages, 75.
- Vernon House, general statistics of, 313.
- Visitors' reports, 290.
- Voluntary admissions, 93.
- WALDEMERE, general statistics of, 312.

Ward's Island lease, 35.

Water supply, 81.

West Hill, general statistics of, 315.

Willard State Hospital, additional accommodations and improvements, 10; annual report, summary, 262; appropriations, 5; average price of

staple articles, 28; capacity and census, 34; cost per capita of maintenance, 24; employees, 32; expenditures for maintenance, 20; fuel and light, cost, 31; general statistics of, 305; medical service, cost, 31.

